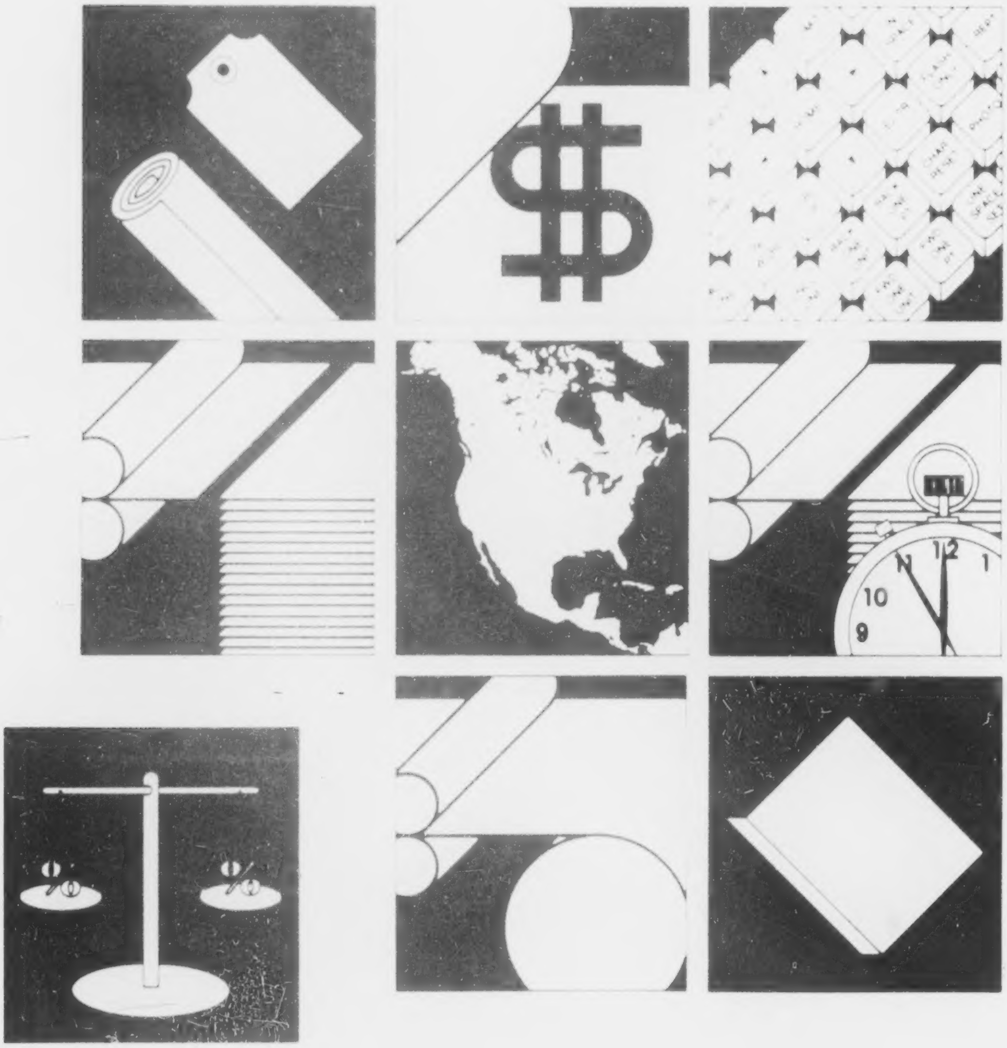
A8740-1.1 U
10/87

1987 Financial Ratio Study



Volume I

1987 Management Guide To The PIA Ratio Studies

1987
FINANCIAL
RATIO STUDY

Volume I: 1987 Management Guide To The PIA Ratio Studies

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

The annual PIA Financial Ratio Study is the most comprehensive survey available on the financial health of the graphic arts industry. To help you use the study effectively, it is our pleasure to present to you this management guide.

The guide is divided into three sections. General information about the ratios is included in the first section. The second section includes step-by-step procedures to analyze the financial statements and important relationships inherent to the study and to prepare an analysis of your own financial statements. Meaningful financial topics relative to the graphic arts field supplement the guide and comprise the third section.

We believe strongly in the importance of sharing this type of information among members of the graphic arts commmunity and are proud to have played a role in compiling the PIA Financial Ratio Study.

H. R. Margolis Company

TABLE OF CONTENTS

Page Numbers

SECTION 1 - BACKGROUND ON THE RATIO STUDIES

THE PIA RATIOS - STANDARDS OF COMPARATIVE ANALYSIS FOR THE PRINTING INDUSTRY 6- 8

PIA MANAGEMENT GUIDE: EFFECTIVE USE OF RATIO STUDIES 9-20

SECTION 2 - ANALYSIS OF THE RATIOS

VALUE ADDED - WHY IT'S IMPORTANT 22-27

HOW WELL AM I DOING? - ANALYZING YOUR REPORT ON OPERATIONS 28-38

THE BALANCE SHEET - HOW WE STAND 39-49

INTERRELATED RATIOS OF THE BALANCE SHEET 50-53

MEANING OF SIGNIFICANT FACTS 54-57

RETURN ON INVESTMENT 58-64

SECTION 3 - MEANINGFUL TOPICS RELATIVE TO THE GRAPHIC ARTS INDUSTRY

A BREAK-EVEN ANGLE TO COST/VOLUME/PROFIT 65-69

THE INVENTORY DECISION - LIFO VS. FIFO 70-73

STRATEGIES FOR BETTER COSTING AND PRICING 74-75

Edited and Prepared by H. R. Margolis Company
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

SECTION 1 - BACKGROUND ON THE RATIO STUDIES

THE PIA RATIO STUDIES - STANDARDS OF COMPARATIVE ANALYSIS FOR THE PRINTING INDUSTRY

The PIA Ratio Studies enable printing managers, using these standards of comparative financial analysis, to determine their company's position in the printing industry. Using the information from the ratios, printing managers can decide which of their company's policies to maintain, which to eliminate and which to improve in order to increase profits.

The Ratio Studies are organized into 13 individual studies, each in its own booklet. The 13 booklets are:

- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers - Heatset
- Web Offset Printers - Non-Heatset
- Combination Offset - Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

Each booklet allows printing managers to compare their company's financial operations with the financial operations of other companies, including the industry's Profit Leaders, with similar manufacturing specialties, sales volume and geographical area. A company's strengths and weaknesses can be identified by the information contained in the Ratio Studies. They also help answer questions such as:

Are my expenses too high in relation to sales?
Is there too little or too much inventory in stock?
Am I producing enough value added sales?
Can we meet our debts as they mature?
Are our customers' receivables being collected promptly?
Should we increase our selling prices?
How can we increase our profits?

The value of the Ratio Studies to printing companies depends largely on how effectively they are used. The purpose of this management guide is to help printing managers make the fullest use of the Ratio Studies in analyzing and interpreting relevant financial information.

This guide is made up of three sections.

Section 1 introduces the ratios and discusses the three basic steps in using them -- set-up, comparison, and analysis.

Section 2 expands upon the analysis and explains the relationship of the ratios to critical concepts in the financial management of printing companies.

Section 3 addresses several topics of current, more general, concern to the printing industry.

I. STATISTICAL INFORMATION -- HOW THE NUMBERS ARE FIGURED

The PIA Ratio Studies are computed using a method that avoids a distortion of the data by companies with very large or very small dollar amounts in any particular category. This distortion is known as "self-weighting" and unless precautions are taken, is rather common when dealing with statistics with extreme highs and lows.

Our method is a valid statistical approach that establishes a ratio or percentage between the sales of a company and each of its cost categories. The percentages are added and an average is computed. This average gives us an excellent basis for comparison.

The following example shows how this method eliminates the problem of possible distortion by very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

II. WHO ARE "ALL FIRMS?"

In the PIA Ratio Studies the term "All Firms" has two distinct meanings. It is used to designate all the printing firms participating in the Ratio Studies, and at other times it refers to all participating firms in a particular sales category. When the term "All Firms" is used, the context in which it is used will make the meaning clear.

III. PROFIT LEADERS -- AND 8%

The term "Profit Leaders" describes those firms whose before-tax profit on sales is 8% or higher. The 8% profit standard is traditional in the printing industry. Just why 8% marks the dividing point between high profit and low profit is unclear, except that it has proven satisfactory. Each year about 18% of participating firms reach the "Profit Leader" status. Historically, the average pre-tax profits of all Profit Leaders has been 12%, with the range of profits extending from 8% to 16%.

	1983	1984	1985	1986	1987
Percentage of All Firms that are Profit Leaders	18.20%	20.40%	20.10%	16.49%	16.83%
Profit Leaders' Income before Taxes	12.08%	11.90%	11.79%	11.94%	11.49%

IV. WHY NOT USE "RETURN ON INVESTMENT" AS A PROFIT MEASURE?

Return on Investment (ROI) is one of the most comprehensive measures of profitability. Many printers have urged that it be used as the criterion for Profit Leaders. The PIA Ratio Studies confirm that those printing firms earning more than 8% or greater pre-tax profits also show a healthy ROI, averaging 15% in recent years. (For a more detailed study of ROI, see Section 2, pages 58-64.)

However, most of the printing industry relates profit to sales instead of to investment, and our data show that Profit Leaders also have good ROIs. There doesn't seem to be any overwhelming reason to change our measure of profitability at this time, but printing managers should pay close attention to ROI. It is an important measurement standard for management.

The objective of the printing manager in using financial comparative analysis, such as is presented in the PIA Ratio Studies, is to obtain accurate, relevant information about the printing industry. He then can make good, reasoned economic decisions for his business, and increase his printing company's profits. Generally, a printing manager wants to know.....

Are my expenses too high in relation to my sales?
Do I have too little or too much inventory in stock?
Am I producing enough Value-Added sales?
Can we meet our debts as they mature?
Should we increase our selling prices?

And most important.....

How Can We Increase Our Profits?

The PIA Ratio Studies have helped answer these and other questions, but only when used effectively. How to use the Ratio Studies effectively is the subject of this management guide.

PURPOSE

Since their inception, the PIA Ratio Studies have proven that graphic arts industry firms can attain profits. Despite wide ranges of sales and many different areas of service or specialty, many firms have earned a handsome profit. While on the other hand, firms with the same level of sales and the same specialties, have not been profitable. The purpose of the Ratio Studies is to guide you and your company to higher profits, regardless of your size or specialty. The key is knowing how to use these studies effectively.

There are three basic steps in using the Ratios:

1. Set-up

2. Comparison

3. Analysis

Each of these steps is discussed below.

I. SETTING UP A CHART OF ACCOUNTS

A chart of accounts is your framework for collecting and recording financial data. If your chart of accounts is well designed, you can easily extract all the information necessary to compare your firm's performance with that of the industry's Profit Leaders.

There are other purposes, as well, for your chart of accounts. For example, a well designed, detailed chart of accounts can help you compute more accurate hourly cost rates. Valuable information for managing your budgeting and forecasting will be at your fingertips.

But charts of accounts are not like shirts or suits that can be purchased off the racks and fit with only a little adjusting. If your chart of accounts is not designed for a printing firm, and specifically your printing firm, it won't be particularly useful. The more "tailor-made" your chart of accounts is -- designed for your firm and your needs -- the more value it will provide.

A chart of accounts should segregate factory, selling and administrative expenses. It also should break down each major classification into more detailed parts. For example, Materials Costs would be divided into paper, ink, film, plates, other chargeable materials, and outside services. Outside services would be broken down further into art, composition, offset preparation, printing, bindery and other.

These are not the only classifications, nor are all the classifications appropriate to your printing firm. For example, if your plant has an in-house bindery and another firm sends out its bindery work, the respective charts of account would reflect this operating difference. However, the general format presented here for organizing a chart of accounts should be followed as closely as possible.

EXAMPLE 1 - HOW TO CHART ACCOUNTS

MATERIAL COSTS		
Paper		$ XXX
Ink		XXX
Film		XXX
Plates		XXX
Other Chargeable Materials		XXX
Outside Services		
Art	$ XXX	
Composition	XXX	
Offset Preparation	XXX	
Printing Services	XXX	
Bindery	XXX	
Other	XXX	XXX
TOTAL MATERIAL COSTS		$ XXX

IDENTIFY FUNCTIONS, DEPARTMENTS AND COST CENTERS

A useful chart of accounts is patterned after your company's organizational structure. Start by identifying your company's major operations, departments and cost centers. It also might be helpful to make a flow chart of how jobs are processed through your present system. This preliminary planning avoids the problems found in Example 2 where the company's accounts are not based on its organizational structure. In this example of how not to chart accounts, the only relevant information is the profit figure. This firm's management has no other data to identify problem areas or to evaluate the company's operations.

EXAMPLE 2 - HOW NOT TO CHART ACCOUNTS

SALES		$5,420,000
EXPENSES		
Wages	$1,788,600	
Materials	1,242,800	
Other materials	732,200	
Factory Expense and Maintenance	277,900	
Utilities, Electric	21,300	
Delivery	59,000	
Travel	48,200	
Advertising	26,100	
Telephone	26,600	
Insurance	30,900	
Office Expense	139,800	
Bad Debts	21,700	
Heat	38,300	
Employee Benefits	142,500	
Miscellaneous Expense	72,600	
Commissions	149,000	
Sales Discounts	39,400	
Depreciation	166,400	
Rent	124,200	
Taxes	153,900	5,301,400
		118,600
OTHER INCOME		
Discounts Taken	92,300	
Other Income	45,500	137,800
INCOME BEFORE INCOME TAXES		$ 256,400

Every company's financial system should be controlled through a chart of accounts. Each account should be broken down into detailed headings so that as much information as is necessary or relevant can be recorded. In broad terms, charts of accounts have similar formats, listing assets owned (cash, etc.), debts owed, income received (sales), and expenses. Specific accounts, however, are determined by the specific business or industry that the company is in.

For the printing industry, the PIA Standard Classification of Accounts is an excellent guide for shaping a chart of accounts to your particular firm. A well-designed chart of accounts for the printing industry will separate material costs into those accounts that apply to the industry and your firm. (See Example 1 - How to Chart Accounts). Note that in this example, "Outside Services" is divided into even greater detail. Using this detailed system, you will be able to identify (and correct) problem areas quickly. Without it, problem areas will remain hidden like a crack in an underground water pipe.

SUMMARY

1. Your chart of accounts should be based on your organizational structure.
2. Identify major functions, departments and cost centers.
3. How complex your chart of accounts is depends on the size of your company, the products and processes involved.
4. Try to make a flow chart of how jobs are processed through your system.
5. Diagram your functions and/or departments. (See Example 3)

IDENTIFY INCOME AND EXPENSES

Next, list in detail each type of income and each type of expense incurred. Using medium-sized printing firms as an example, the organizational structure in Example 3 shows it has administrative, selling, and factory departments. The factory department is further divided into cost centers for pre-press, press, bindery, and shipping. The pre-press cost center is broken down further into art, composition, and camera cost centers.

LIST ACCOUNT CLASSIFICATIONS

Listing your account classifications is the next step in developing your chart of accounts. These classifications should conform to those in the PIA Ratio Studies (PIA Standard Classification of Accounts) and should be arranged in a similar format. Keep in mind that detail is essential.

SAMPLE CLASSIFICATIONS IN A PRINTING COMPANY'S CHART OF ACCOUNTS

Current Assets

- Cash in bank
- Cash on hand
- Accounts receivable
- Allowance for doubtful accounts
- Other receivables
- Inventory
  - Work in progress
  - Paper
  - Other chargeable materials and departmental supplies
- Prepaid expenses
  - Insurance
  - Interest
  - Officers' life insurance
  - Taxes and other
- Loans and exchanges

Current Liabilities

- Notes payable
- Accounts payable
- Employees' federal withholding tax
- Employees' and accrued FICA
- Employees' local tax withheld
- Employees' state tax withheld
- Accrued state unemployment tax
- Accrued federal unemployment tax
- Sales tax collected
- Estimated state and federal income taxes payable
- Accrued
  - Business taxes
  - Interest
  - Payroll
  - Vacation payroll
  - Other

Shareholders' Equity

- Common Stock
- Preferred Stock
- Paid-in surplus
- Retained earnings
- Dividends paid
- Treasury stock

Income

- Sales
- Sales returns and allowances
- Sales discounts

Cost of Printing Produced

- Materials
  - Purchases
    - Paper
    - Ink
    - Film
    - Plates
    - Other materials
  - Outside services
    - Art
    - Composition
    - Offset preparation
    - Printing services
    - Bindery
    - Other
  - Purchase Discounts

SAMPLE CLASSIFICATIONS IN A PRINTING COMPANY'S CHART OF ACCOUNTS
(Continued)

- Factory labor
  - Direct labor
  - Indirect labor
  - Supervision
  - Employees' benefits - factory
  - Payroll taxes - factory
- Factory expenses
  - Factory depreciation
  - Factory supplies and expenses
  - Heat, light and power
  - Postage and freight
  - Real estate taxes
  - Rent
  - Repairs and Maintenance
    - Buildings
    - Equipment
  - Vehicle expense

Administrative Expense

- Accounting and legal
- Bad debts
- Collection expenses
- Computer services
- Contributions
- Depreciation - administrative
- Dues and subscriptions
- Employees' benefits - administrative
- Office salaries
- Office supplies and expenses
- Officers' life insurance
- Officers' salaries
- Payroll taxes - administrative
- Postage
- Taxes - business
- Telephone

Selling Expenses

- Advertising
- Auto expenses - selling
- Depreciation - selling
- Employees' benefits - selling
- Gifts and flowers
- Payroll taxes - selling
- Sales office expenses
- Sales salaries and commissions
- Sales and travel expenses

Interest Expense

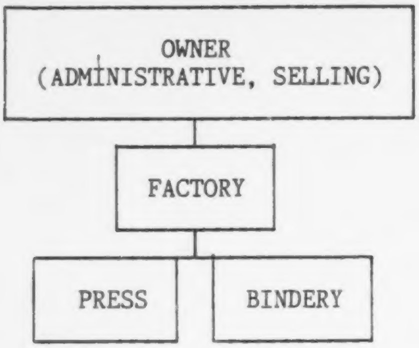
(Interest expense is the only account in this category, but it is, nevertheless, an essential account.)

Other Income - Expense

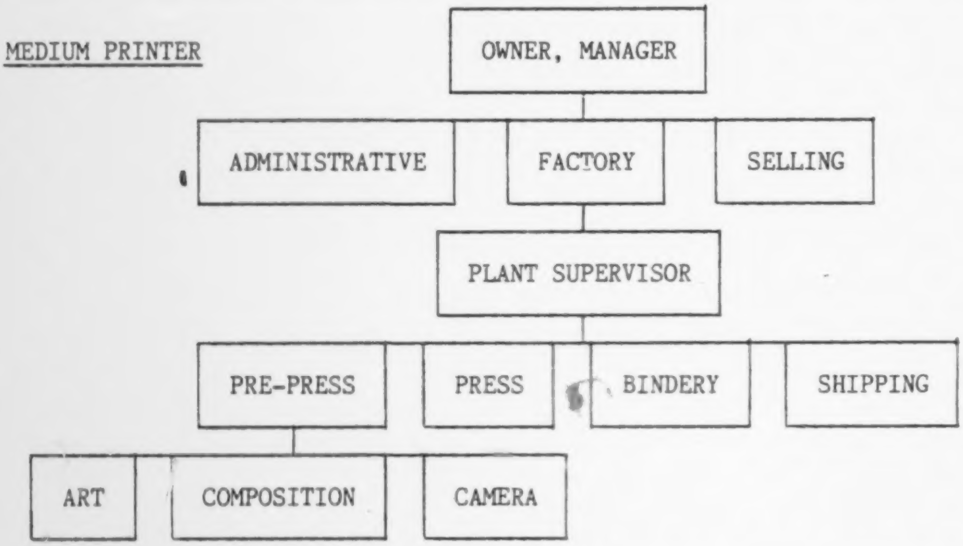
- Interest Income
- Gain or loss on sale of fixed assets
- Other income
- Other expense
- Provision for state and federal income taxes

EXAMPLE 3 - ORGANIZATIONAL CHARTS

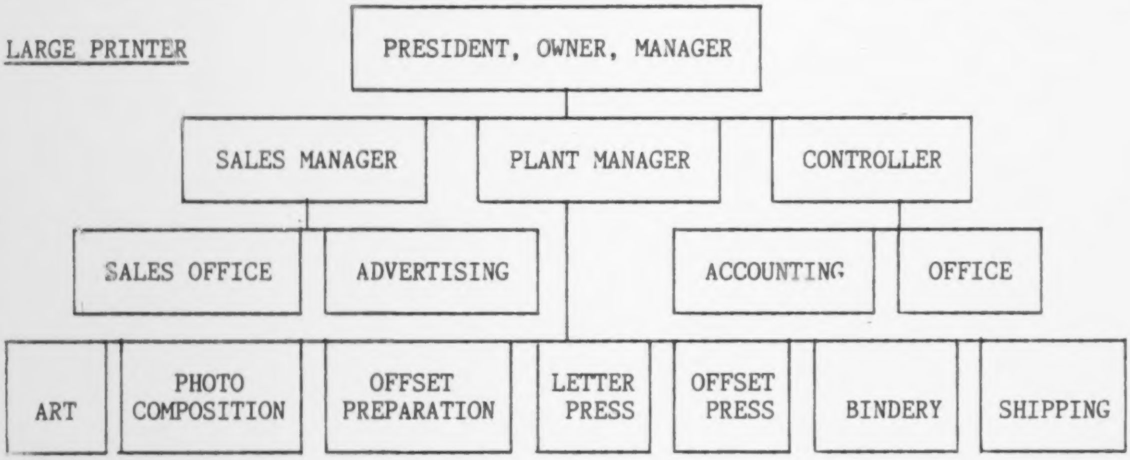
SMALL PRINTER


OWNER
(ADMINISTRATIVE, SELLING)
FACTORY
PRESS
BINDERY

MEDIUM PRINTER


OWNER, MANAGER
ADMINISTRATIVE
FACTORY
SELLING
PLANT SUPERVISOR
PRE-PRESS
PRESS
BINDERY
SHIPPING
ART
COMPOSITION
CAMERA

LARGE PRINTER


PRESIDENT, OWNER, MANAGER
SALES MANAGER
PLANT MANAGER
CONTROLLER
SALES OFFICE
ADVERTISING
ACCOUNTING
OFFICE
ART
PHOTO COMPOSITION
OFFSET PREPARATION
LETTER PRESS
OFFSET PRESS
BINDERY
SHIPPING

SEGREGATE DUTIES

We will use one expense -- Payroll -- to illustrate the process. Start by identifying each employee's job function. Then organize the job functions, based on your organizational chart, into factory employees, administrative employees and selling employees. Organize payroll related expenses, such as payroll taxes and employee benefits, in the same way.

Identifying the job functions of factory employees is not difficult, but it does take some planning. The factory is where most of your employees work and where your company's product is made. Let's assume that your payroll records have identified 15 factory employees.

The positions used here are for illustration purposes only and do not necessarily reflect the proportions of indirect to direct wages as would be found in a standard operation. These job functions are:

JOB POSITION OF FACTORY EMPLOYEES

1. Plant Supervisor
2. Shipping Clerk/Truck Driver
3. Platemaker
4. Artist
5. General Help
6. Pressman
7. Pressman's Apprentice
8. Proofreader
9. Compugraphic Operator
10. Stripper
11. Maintenance
12. Cutter
13. Folder
14. Hand Binder
15. Cameraman

Now, match each job with the corresponding cost center in the organizational chart. Note that there is a separate job function for general helpers, shipping clerks/truck drivers. Cost-benefit analysis comes into play here. General helpers are used in almost every part of the plant. Their work cannot be directly charged to a particular job, therefore their payroll expenses should not be classified as direct labor. The same applies to shipping clerks/truck drivers. These employees should be classified as indirect labor, responsible for general factory duties. The PIA Standard Classification of Accounts itemizes these wages as:

a. General Factory Salaries and Wages
b. Packing, Shipping and Delivery Wages

HOW TO CHART THE ACCOUNTS

Based on the PIA Standard Classification of Accounts, we will chart the Factory Payroll accounts using the information obtained by identifying functions and segregating duties. This is the result:

EXECUTIVE SALARIES	Plant Supervisor
INDIRECT WAGES	
PACKING, SHIPPING AND DELIVERY WAGES	Shipping Clerk/Truck Driver
GENERAL FACTORY WAGES	General Helper Maintenance
DIRECT WAGES	
PRE-PRESS	
ART	Artist
COMPOSITION	Compugraphic Operator Proofreader
CAMERA	Cameraman Stripper
PLATE	Platemaker
PRESS	Pressman Pressman's Apprentice
BINDERY	Cutter Folder Hand Binder

Combining individual's wages, by department, for your Factory Payroll section of the Statement of Income would result in:

FACTORY PAYROLL	
Executive salaries	$ XXX
Direct wages	XXX
General factory wages	XXX
Packing, shipping and delivery wages	XXX
Payroll taxes	XXX
Employee benefits	XXX
TOTAL FACTORY PAYROLL	$ XXX

In this example we dealt only with Factory Payroll. Other expenses and revenues should be identified, separated and charted according to the proper cost centers in your organizational chart. The result will be an organized chart of accounts from which you can draw information for meaningful financial statements.

II. COMPARE

There must be some common denominator that will enable us to compare the financial information in your chart of accounts with the PIA Ratio Studies. When dollars are converted into percentages, you then have a common denominator called "common size" statements. Dollar amounts will be different for each firm; "common size" statements or percentages are comparable because each company's percentage base for comparison is identical -- 100% of Sales, 100% of Value Added, or 100% of Total Assets.

With your chart of accounts set up to conform to the PIA Standard Classification of Accounts, and the dollar amounts converted to "common size" or percentages of sales, you are ready to compare your costs and profits with PIA Profit Leaders. Using Example 4 (below), Your Company's costs of $426,800 for Outside Services may be good or poor -- we can't tell. But, when we see it represents 10.67% of sales, it becomes very meaningful when compared to the target range set by PIA Profit Leaders -- 8.50% of sales, a difference of 2.17%.

EXAMPLE 4 - REPORT ON OPERATIONS

	YOUR COMPANY		PIA PROFIT LEADERS	DIFFERENCE
	DOLLARS	"COMMON SIZE" OR % OF SALES	"COMMON SIZE" OR % OF SALES	MORE (LESS)
SALES OR VALUE OF PRODUCT PRODUCED	$4,000,000	100.00%	100.00%	-
FACTORY COST OF PRODUCT				
MATERIAL				
Paper	835,500	20.89	22.07	(1.18)%
Other Chargeable Materials	214,500	5.36	4.19	1.17
Outside Services	426,800	10.67	8.50	2.17
TOTAL MATERIAL	1,476,800	36.92	34.76	2.16
FACTORY PAYROLL	1,075,200	26.88	23.26	3.62
FACTORY EXPENSE	511,200	12.78	12.18	0.60
TOTAL FACTORY COST OF PRODUCT	3,063,200	76.58	70.20	6.38
GROSS PROFIT	936,800	23.42	29.80	(6.38)
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	515,200	12.88	10.07	2.81
Selling expenses	217,200	5.43	8.23	(2.80)
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	732,400	18.31	18.30	0.01
INCOME BEFORE INTEREST EXPENSE	204,400	5.11	11.50	(6.39)
Interest expense	79,600	1.99	1.58	0.41
OPERATING INCOME	124,800	3.12	9.92	(6.80)
Other Income	28,000	0.70	1.72	(1.02)
INCOME BEFORE INCOME TAXES	$ 152,800	3.82%	11.64%	(7.82)%

PICK YOUR CATEGORIES FOR COMPARISON

Your "common size" statements or percentages can be compared with other firms in several different ways. You may compare your percentages with those of All Firms in a particular category such as sales volume or product specialty, or only with Profit Leaders in those categories. The illustration below, Categories For Comparison, lists the possible categories of comparison. Keep in mind that there may be other outside factors influencing your firm's position in the industry. The PIA Ratio Books suggest what these other relevant factors may be, to help you refine your analysis.

CATEGORIES FOR COMPARISON

SALES VOLUME - Ratios and statistics are presented in six categories:

Sales to $250,000
$250,000 - $500,000
$500,000 - $1,500,000
$1,500,000 - $5,000,000
$5,000,000 - $10,000,000
Sales over $10,000,000*

* A separate PIA Ratio Book LARGE PRINTING FIRMS' RATIOS breaks down this sales category as follows:

$10,000,000 - $20,000,000
$20,000,000 - $40,000,000
$40,000,000 - $80,000,000
$80,000,000 - $160,000,000

PRODUCT SPECIALTY - The PIA Ratio Studies carry "common size" or percentages for firms with more than 50% of their sales in these key market areas:

Commercial and Advertising
Magazine and Periodical
Newspaper
Packaging
Financial
Direct Mail - Catalog
Directory
Label
Book
Typographers
Binders
Preparatory Specialists
Quick Printers

PROCESS - The PIA Ratio Studies provide comparisons of firms mainly using these processes:

Sheetfed Offset
Web Offset - Heatset
Web Offset - Non-Heatset
Combination Offset - Sheetfed/Web

GEOGRAPHIC AREA - Significant financial information for comparison can be drawn from companies working in the same economic environment. The Ratio Studies break down geographic regions as follow:

New England and Upstate New York
Metropolitan New York and New Jersey
Eastern Pennsylvania, Maryland and D.C.
Southeast Atlantic
East North Central
South Central
Chicago Area
West North Central
Plains and Mountain States
Pacific Southwest
Pacific Northwest
Canada

Identify which of the categories listed above reflect your company's operations and compare your results with theirs. You will then be ready for the next, and most important, step in the meaningful use of the ratios: ANALYSIS. Analysis will help you identify the problem areas and the profitable areas in your company's operations.

III. ANALYSIS

One reason, but by no means the only reason, for analyzing the financial status of your printing business is to determine its overall position in the printing industry. Comparing your company with other, similar companies, enables you to determine which financial operations should be maintained at their current level and which should be improved to achieve your profit objectives.

Comparative financial analysis should be broad. It is important to evaluate all of the ratios together, not just individually. Moreover, your financial analysis should include an examination of ratios over a period of time, and a comparison of results with trends in the printing industry.

Evaluate Ratios Collectively, Not Individually

Individual ratio results may pinpoint a problem area in your printing operation or they may highlight a very profitable cost center, but individual ratio results do not provide in-depth financial information. Each ratio should be analyzed together with other ratios and facts concerning your company.

For example, in examining your firm's income statement, you may find increases in your percentages of depreciation expense and interest expense, increases that may seem alarming at first glance. An analysis of the balance sheet, however, may show that such alarm is unwarranted.

Top management may have long-range profit planning goals that should be factored into the analysis. There may have been a plant expansion (increase in assets) funded through attractive debt financing (increase in liabilities). A slow, outdated press may have been replaced by a new, more efficient one. Deeper analysis into the income statement may show that the company's income tax rate was lowered by investment tax credits and accelerated depreciation on the new press. Don't take one ratio out of context. Make your analysis broad enough to take all your financial results into consideration.

Observe, Assess, Monitor

Your firm and its operations are not static. Observing your ratios over a period of time will show a number of trends and movements in your expense and profit picture on which a printing manager may wish to act. If some action is taken, monitoring ratios on a regular basis will help show if the action was effective or appropriate.

Trend Analysis

If one of your company's ratios is way "out of line," it is possible that there is nothing you can to to improve it. This is especially true if the entire printing industry is suffering a slump in a particular area. Furthermore, if industry trends should be showing improvement, any action on your part may be counter-effective.

For example, when paper costs soared nationwide, some printing managers might have panicked and made hasty decisions to avoid tying up substantial amounts of cash by reducing their paper inventories. For some printing firms, this decision was a disaster because shortly after the price increase the nation-wide supply of paper became scarce. Those who reacted in panic and chopped inventory found that their shortage of paper resulted in lost accounts, soaring operating expenses and even lower profits.

Trends are only clues and should be considered together with other concrete facts. Remember that factors out of your or the industry's control may cause trends to reverse themselves at any time.

Assess The Printing Industry

Comparing financial relationships between your company and the PIA Ratio Standards permits you to size up your company's performance in relation to High Profit firms and the industry as a whole. The next section of this book provides detailed information on using the PIA Ratio Studies effectively. It is designed to help you begin to figure ways of improving those areas and operations that most need attention.

SECTION 2 - ANALYSIS OF THE RATIOS

VALUE ADDED - WHY IT'S IMPORTANT

If sales are up but profits are down, something is wrong. Even when sales are level and profits are lower, management has a problem. The problem area, in all probability, is in your Inside Sales, or Value Added. Too often printing managers are unfamiliar with this critical concept and do not realize this may be the root of their problem.

VALUE ADDED DEFINED

Value Added is the term for the sale of products manufactured in a company's plant. It is determined by subtracting the cost of materials and outside purchases from the sale price. In other words, Value Added is the value added to purchased materials and outside services by your manufacturing efforts.

SALES		$100
LESS: MATERIALS		
Paper	$22	
Other chargeable materials	6	
Outside services	7	35
VALUE ADDED		$ 65

VALUE ADDED MAXIMIZES PROFIT

Profit is achieved from sales of a company's own manufacture. This is a basic principle of accounting. Or, to put it more simply: you make your profit from the work done inside your own plant, not outside. When this key principle is ignored, printing firms ignore a valuable tool for earning maximum profits. There may be other reasons, of course, for poor operating performance, but neglect of the Value Added principle is the major and most frequent reason for low profits.

UNDERSTANDING VALUE ADDED

Value Added, the remainder after cost of materials is deducted from your sales, is all you have to pay your other expenses. These expenses include factory labor, factory expenses, administrative expenses, selling expenses and interest. When these expenses have been paid, what remains is your profit.

These expenses are, for the most part, fixed costs, and as "overhead" do not vary significantly. This is true when a company's operations remain within a steady range. They would change if there were significant growth or shrinkage in the company's size and operation. With "overhead" remaining relatively constant, you want to maximize your Value Added for greater profits. This is different from the basic "cost sheet concept" usually applied in the printing industry.

EXAMPLE -- HOW VALUE ADDED WORKS

This example illustrates the effect on operating income when we increase from $635,600 to $675,000 the Value Added derived from $1,000,000 of sales. We will assume that "overhead" (factory labor, other factory, administrative, selling and interest expenses) will remain the same. We are simplifying this example to prove that within this relevant range these expenses are, in effect, fixed costs.

	Original	After Increase in Value Added
SALES	$1,000,000	$1,000,000
Cost of Materials	364,400	325,000
VALUE ADDED	635,600	675,000
"Overhead"	591,000	591,000
Operating Income	$ 44,600	$ 84,000

THE BETTER STATEMENT

Statements of Operations have more meaning when they are prepared on the basis of Value Added. Too often, printers look to sales as the sole measure of profit when, in fact, Value Added is always the better measure. For example, both these results are possible for a printing operation in a given month:

	Result A	Result B
SALES	$125,000	$ 90,000
MATERIALS	60,000	15,000
VALUE ADDED	$ 65,000	$ 75,000

This example shows that a month's sales of $125,000 producing $65,000 of Value Added are not as good as the lower sales of $90,000 that provide $75,000 of Value Added. The lower sales total, in this case, produces $10,000 more to cover overhead...and increase profit. In this example the higher sales figures are misleading. Value Added gives a truer picture by clearing the distortion that material costs introduce into the traditional operating statement.

There would be significant differences in ratios based on percentages of sales in a comparison of operating statements for a short-run sheetfed company and that of a web-offset printer. The reason for the differences would be the amount of materials purchased and consumed by the web-offset printer, compared to the short-run sheetfed operation and the amount of direct labor incurred.

Comparison of ratios based on sales, as in Example 5, would seem to show that the web-offset operation has an 8.48% lower cost for factory payroll and factory expense (27.88% for web-fed as compared to 36.36% for sheet-fed). This is because a substantial portion of the sales of the web-offset company was materials.

EXAMPLE 5

	COMPANY S - SHEETFED		COMPANY W - WEB-FED	
		% of Sales		% of Sales
SALES OR VALUE OF PRODUCT PRODUCED	$1,000,000	100.00%	$1,000,000	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other Chargeable Materials	42,800	4.28	35,000	3.50
Outside Services	87,900	8.79	30,000	3.00
TOTAL MATERIALS	328,000	32.80	452,900	45.29
FACTORY PAYROLL	241,800	24.18	177,500	17.75
FACTORY EXPENSE	121,800	12.18	101,300	10.13
TOTAL FACTORY COST OF PRODUCT	691,600	69.16	731,700	73.17
GROSS PROFIT	308,400	30.84	268,300	26.83
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	115,000	11.50	83,700	8.37
Selling expenses	72,500	7.25	58,000	5.80
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	187,500	18.75	141,700	14.17
INCOME BEFORE INTEREST EXPENSE	120,900	12.09	126,600	12.66
Interest expense	18,300	1.83	18,300	1.83
OPERATING INCOME	102,600	10.26	108,300	10.83
Other Income	10,200	1.02	10,200	1.02
INCOME BEFORE INCOME TAXES	$ 112,800	11.28%	$ 118,500	11.85%

But comparing the ratios, based only on sales of these two companies, is much like comparing apples and oranges. The true comparison cannot be made until the distortion caused by the differences in materials is eliminated. In this circumstance, the difference in the cost of materials (45.29% for the web-fed company as compared to 32.80% for the sheet-fed company) is caused by the nature of web printing as compared to sheet-fed printing, rather than operating efficiencies. Now when we look at Example 6, which is based on Value Added, we see that factory payroll and factory expenses are 50.96% for the web-fed company as compared to 54.11 % for the sheet-fed company, a difference of only 3.[illegible]5%.

EXAMPLE 6

	COMPANY S - SHEETFED		COMPANY W - WEB-FED	
		% of Value Added		% of Value Added
SALES OR VALUE OF PRODUCT PRODUCED	$1,000,000		$1,000,000	
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	197,300		387,900	
Other Chargeable Materials	42,800		35,000	
Outside Services	87,900		30,000	
TOTAL MATERIALS	328,000		452,900	
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSE	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	115,000	17.11	83,700	15.30
Selling expenses	72,500	10.79	58,000	10.60
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	18,300	3.34
OPERATING INCOME	102,600	15.27	108,300	19.80
Other Income	10,200	1.52	10,200	1.86
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 118,500	21.66%

Almost every company's product mix is different. By using Statements of Operations based on Value Added, this product mix difference is eliminated. Value Added is always a better statement with which to evaluate your operations.

MEANINGFUL MARK-UPS FOR COST

With an understanding of the Value Added concept you can focus on materials mark-up to recover overhead. It is essential that materials are priced at their cost plus their proper share of the allocated overhead. Because Value Added is so important to your profitable operation, overhead recovered by materials pricing must be correct. The traditional 5%, 10% or 15% mark-up of materials (so-called handling charges) may or may not be correct. You won't know for sure unless material costs are treated as another cost center, just as you have established a press cost center to determine the correct press hourly rate.

Once this is done, you will have a cost sheet that contains materials with their proper share of overhead and cost center costs. With this base information, you can apply the proper profit mark-up which is discussed below. Profit mark-up will vary as the relationship changes between materials and manufacturing.

PROFIT MARK-UPS -- VALUE ADDED CONCEPT

Profit mark-ups should take into account the Value Added concept; the higher the proportion of materials in a job, the higher should be the profit mark-up.

A sound profit mark-up policy is one that achieves and complements the business objectives of your firm. Printing firms should always seek to maximize their Value Added by attracting jobs with a high Value Added, and by converting low Value Added jobs to higher ones. Note this general rule: The most desirable jobs are those with high Value Added and lower profit mark-up. Conversely, jobs with a small Value Added are less desirable and should receive a higher mark-up.

There is no neat formula to separate good jobs from fair or poor jobs. What is presented here is an overall principle which you can integrate into your pricing procedures with little effort.

For example, let's look at a "good" job and a "better" job:

	GOOD JOB	BETTER JOB
Materials	$ 8,000	$ 2,000
Cost center costs	2,000	8,000
TOTAL	$10,000	$10,000

Before profit mark-up, the Value Added of the "good" job is only $2,000. Now price this job and include a profit. The "better" job has a Value Added of $8,000 before profit mark-up. Now, price this job with a profit mark-up.

If you followed the principle presented earlier, your prices should have included a higher profit mark-up for materials and cost centers in the "good" job and a lower profit mark-up for the "better" job. Why? Because the "better" job contributes more to fixed and variable overhead, and ultimately to profits.

VALUE ADDED AND SALES COMPENSATION

While it is generally accepted that sales people working on commission are more effective than salaried sales people, little attention is paid to the kinds of jobs they bring in. Commissions are usually based on total sales dollars, regardless of the Value Added component of the sale.

The weakness of this practice becomes clear when sales compensation is examined in light of the Value Added concept. Does a sales person have an incentive to bring in high Value Added jobs -- "better" jobs -- when he is paid a commission solely on sales volume? No! What reward does a sales person look forward to when he seeks out and closes a high Value Added job? None!

Sales commissions should be a percentage of Value Added. Basing sales compensation on Value Added is becoming an increasingly popular policy among printing firms. It already has been adopted by some of the most successful firms in the industry, and for good reason. These sales people and their high Value Added jobs are contributing more to the profitability of their firm.

In these compensation plans, the commission on the Value Added in a job is calculated to be the same as the commission earned on an average job using an average amount of materials or outside purchases.

It might appear that sales commissions might be reduced if commissions were based on fewer Value Added dollars, but this is not the case. Commissions would be reduced only for those sales people who sell large amounts of paper and other outside services. Those sales people who sell high Value Added jobs, and who received no special recognition for these desirable sales -- those jobs with a significant amount of inside manufacture -- would now receive increased commissions.

The important motivation built into Value Added compensation is, of course, higher earnings for sales people who bring in higher Value Added jobs. The justification is that these jobs pay more overhead and produce a greater profit, contributing most to management's objectives.

REPORT ON OPERATIONS — WHAT'S IN IT FOR ME?

Every printing manager has to pause occasionally, step back, take a deep breath, and ask, "How well am I doing?" The answer to this question can be found in his firm's operating statement.

A financial statement is, generally, an historical document. It tells what happened in a particular year or series of years. But, by comparing, evaluating and analyzing his historical operating statement, the printing manager can open a window into the future...and more.

The effective manager uses the operating statement as an important tool in the decision-making process. Once historical data is accumulated and analyzed, the manager can form plans for the future, set objectives and attempt to control the outcome of those plans.

PIA Ratios are especially helpful in deciphering operating results. By comparing one's own company with other companies in the industry, problem areas are highlighted and identified. Since PIA Ratios are offered as "common size" or percentages, more precise comparisons can be made with other firms, regardless of different dollar sales volumes. Even closer evaluations can be made using PIA's specialized Ratio Study volumes, but the discussion in this Guide will deal with the book, All Printers by Sales Volume.

A WORD ABOUT RATIOS IN GENERAL

Ratios should be viewed as a starting point and as a powerful tool for more effective, profit-oriented management. By comparing your firm's ratios with those of PIA's high profit companies, you can pinpoint costs and expenses in your operation that should be examined in greater depth. You can get insights into operating trends through these comparisons and make intelligent judgments regarding their significance.

While making the comparisons you should keep in mind the peculiarities of business, technological changes and economic factors which might be affecting the results shown on the operating statements.

When variances occur between the objective (high profit standards) and the achieved (lower ratios in your firm's operating statement) or, if you find that your firm has better ratios than PIA's Profit Leaders, ask the following questions:

- Why did the costs differ?
- Was the difference adverse or favorable?
- Who or what was responsible for the difference?
- What can or should be done about it?

SAMPLE ANALYSIS OF THE OPERATING STATEMENT

The report on operations in All Printers by Sales Volume is arranged according to sales as follows:

All Firms Reporting
Sales to $250,000
Sales from $250,000 to $500,000
Sales from $500,000 to $1,500,000
Sales from $1,500,000 to $5,000,000
Sales from $5,000,000 to $10,000,000
Sales Over $10,000,000

Within each sales range, ratios are provided for All Firms and for Profit Leaders, those firms earning 8% or more profit on sales. Achieving ratios similar to those of the Profit Leaders should be a printing company's objective. We will direct our comparisons toward that goal.

Separate line items on the Report on Operations will be defined as they come up in discussion.

Pages 36-38 show a sample "PIA Ratio - Report on Operations and Supporting Schedules," and an operating statement for a fictional company, "Printemps."

Printemps, our fictional company, is a sheetfed offset printer. Its sales are $7,000,000 for the current year. The columns for the sales range, $5,000,000 to $10,000,000 have been taken from a PIA Ratio Study for our comparison.

The next step is to list the dollar amounts in Printemps' operating statement in the same order as the PIA Chart of Accounts. Now we are ready to convert Printemps' dollar figures to percentages of sales. When that is done, we can compare, side by side, Printemps' operating results with the PIA Ratio Study results.

You should compare in the same way your firm's percentages item-by-item with the Ratio Study results.

In our analysis, we will begin by listing what costs should be included in the various line items on the operating statement. Next, we will compare our fictional company, Printemps, with the results in the Ratio Study, discussing the major significant differences. Finally, we will try to analyze what caused the differences and suggest how the situation could be improved in the future.

SAMPLE COMPARISON

Sales Or Value of Product Produced

Reports on Operations start with sales, the amount you charge for your product. All cost-cutting practices are insignificant if you do not price your company's products intelligently. Printing is a made-to-order product. Every job is different and uses different facilities in your plant for varying periods of time. You must know your cost. To price your finished job intelligently, you also must have a good system for gathering those costs and formulating a sales price that is competitive and profitable. Printemps' sales are $7,000,000. Further analysis will help determine how well this firm is pricing its product.

Factory Cost of Product -- Materials -- Paper

Paper usually represents a printer's largest single cost on a job. Printemps' ratio for paper costs compare as follows:

PIA Profit Leaders	Printemps	Variance
23.97%	29.76%	(5.79)%

The variance is unfavorable. Printemps is spending much more on paper than PIA Profit Leaders. Some of the reasons for this might be:

1. Purchasing policies at Printemps need improvement.
2. Waste and spoilage are not controlled properly. It is extremely important that paper be handled properly in all phases of production -- shipment, storage, pressroom, bindery, etc.
3. The type and quality of paper required by the jobs that Printemps does could have an adverse effect on paper costs, as could product mix.

The effective manager will investigate these areas to find out where the problem or problems are occurring. Once this is done, he can take corrective action, if possible, to decrease the amount of money being spent on paper. If the problem is beyond his control and cannot be corrected, he will, at least, understand the reasons for this high paper cost.

Factory Cost of Product -- Materials -- Other Chargeable Materials

This line item on the operating statement has a supporting schedule (page 37) and includes the following:

	PIA Profit Leaders	Printemps	Variance
Ink	1.27%	1.50%	(0.23)%
Film	0.80	3.22	(2.42)
Plates	1.00	2.03	(1.03)
Other Chargeable Materials	1.45	1.02	0.43
	4.52%	7.77%	(3.25)%

Once again, Printemps has an unfavorable variance. It may have a general problem with inventory control which could be affecting all of its material costs. If Printemps has a system of perpetual inventory control, its managers should ask if it's working. Is there enough inventory on hand to prevent costs associated with rush orders? Is the purchasing department operating efficiently? Are prices compared periodically? Another area for inspection might be efficiency or inefficiency in handling materials. Are materials disappearing?

Printemps' variance of 2.42% for film is especially high. Management explains that Printemps has invested in a new scanner and is doing most of its own color separations, as well as some work for other area printers. This accounts for the Other Income which we will discuss later in our review of the Statement of Operations. Printemps also does predominantly high-quality color work, which contributes to its above average percentages for ink, film and plates.

This example of high material costs shows why management should not interpret variances on an isolated basis. You must keep in mind your business and how it operates as you go through your evaluation.

Factory Cost of Product -- Materials -- Outside Services

Outside Services are costs for work done by another company. The previous chapter in this guide, "Value Added -- Why It's Important" explains why it is beneficial for a printer to keep as much work in-house as possible. Printemps' ratios for Outside Services compare with PIA Profit Leaders as follows:

	PIA Profit Leaders	Printemps	Variance
Composition	1.18%	0.40%	0.78%
Offset Preparation	0.93	0.20	0.73
Printing	2.41	1.42	0.99
Binding	2.27	3.15	(0.88)
Other Outside Services	1.37	0.75	0.62
	8.16%	5.92%	2.24%

In the area of outside services, Printemps has a favorable variance of 2.24%.

Printemps does well in Composition, Offset Preparation, Printing and Other Outside Services. However, there is a weakness in its binding operation. This, again, is partially caused by the type of work that Printemps produces. Many of its jobs call for special types of binding processes for which it would be impractical to acquire the necessary equipment. There is, however, some new folding and stitching equipment that Printemps has ordered which will enable them to do more binding in-house. This move will improve their Value Added position and should increase profits.

Factory Payroll

Labor costs are always a large percentage of graphic arts sales. This is one area that can have a drastic effect on your operating statement's bottom line. Even though you may feel like a walnut caught in a nutcracker when dealing with rising labor costs, there are ways to ensure getting as much benefit as possible from the costs. Let's take a look at payroll:

	PIA Profit Leaders	Printemps	Variance
Salaries - Executive	1.88%	2.54%	(0.66)%
Direct Wages	15.74	18.84	(3.10)
General Factory Wages and Salaries	1.55	1.59	(0.04)
Packing, Shipping and Delivery	0.84	0.55	0.29
Payroll Taxes	1.45	1.68	(0.23)
Employee Benefits	2.18	2.08	0.10
	23.64%	27.28%	(3.64)%

Allocating Factory Wages between Direct Wages, General Factory Wages and Packing, Shipping and Delivery is always difficult. Remember that Direct Wages are earned by employees engaged in production (specific cost centers), and General Factory Wages and Packing, Shipping and Delivery Wages are for work not directly chargeable to jobs. It also may be more meaningful to analyze all Factory Wages combined to get an overall picture of how your company compares with the industry's Profit Leaders.

Printemps spends 3.64% more for Factory Payroll than the PIA Profit Leaders. Going down the list, we see that Executive Salaries are high. One reason for this may be that the factory executive is one of the principals in the business.

Printemps' major difference from Profit Leaders occurs in Direct Wages. Printemps' manager should review the following checklist to identify possible causes:

1. Is there a problem in the labor contract? Did managers calculate labor costs and negotiate intelligently?
2. Is there a good, working system in place for gathering job costs so that jobs can be priced realistically?
3. Is there an excessive amount of overtime? Does management know at what point overtime is, and is not, profitable?
4. Are vacations scheduled for slack periods?
5. Does management try to avoid idle time? Do employees wait around because of:
    - poor instructions
    - no material
    - no power
    - no repairman
6. Is production delayed while management makes decisions.
7. Even worse, is one job taken off the press to get a "rush" job through, thus causing extra make-ready time?
8. Do sales and manufacturing departments work together to determine which jobs have economic priority?

Because labor is so expensive, management has to watch it closely, and control costs tightly. Printemps is trying to do this by putting one of the firm's owners on the production floor. This will help keep lines of communication open between management and factory and should promote more efficient operation of the plant.

Factory Expenses

Our Chart of Accounts classifies Factory Expenses as Fixed and Other. Fixed Expenses are relatively constant regardless of a firm's level of productivity. Printemps' total Fixed Expenses compare as follows:

	PIA Profit Leaders	Printemps	Variance
Total Fixed Expenses	6.68%	7.64%	(0.96)%

The largest unfavorable variances in this classification occur in:

Depreciation - other	(1.17)%
Insurance	(0.45)%
Utilities	(0.35)%

The increase in Printemps' depreciation expense can be attributed to its recent purchase of a scanner. However, there is no obvious explanation for the unfavorable variance in insurance. Among the reasons could be the location of Printemps' plant, possibly in an area of higher risk or liability, resulting in higher insurance rates.

Management should review its insurance policies to see if there is proper coverage and to determine if it is getting the best available price. Printers should shop for the best deal for their insurance coverage which, like paper or any other outside purchase, is a product which varies in price. Judicious shopping can result in very substantial cost reductions for the same amount of coverage. No insurance policy should be agreed to until several brokers have been contacted for quotes. And, these policies should be reviewed regularly to see if even better terms can be secured.

Printemps also should be concerned about its utilities cost. Has there been a recent energy-saving review? Are machines shut down when not in use? Are the heating and air conditioning systems outdated and inefficient?

Other Factory Expenses vary with the level of production. Control of these expenses is important to increasing profits. Printemps needs improvement in some of the following areas:

	PIA Profit Leaders	Printemps	Variance
Factory Supplies and Expense	1.86%	2.39%	(0.53)%
Packing, Shipping and Delivery	1.05	0.92	0.13
Repairs and Maintenance	1.52	2.15	(0.63)
Other Factory Expenses	0.72	0.32	0.40
	5.15%	5.78%	(0.63)%

The variance of 0.53% in Factory Supplies and Expense may warrant inspection. Are supplies controlled and purchased effectively? Repairs and Maintenance also compares unfavorably with Profit Leaders. Printemps should review its maintenance policies to see whether proper maintenance schedules are followed. Are machines breaking down because of neglect or age?

Gross Profit

We have now reached the Gross Profit line in Printemps' Report on Operations. So far in our analysis we have discussed where significant variances appear and possible areas of improvement. The most controllable costs frequently appear above the Gross Profit line. Printemps' Gross Profit percentage is 15.85% compared to 27.88% for the PIA Profit Leaders. When Gross Profit ratios consistently fall below that of Profit Leaders, as is the situation with Printemps, management must examine problem areas closely and be prepared for considerable belt tightening. Gross Profit has to be high enough to cover Administrative and Selling Expenses, and pay for Interest Expense.

Administrative Expenses

Printemps has an average administrative staff. The President is the administrative executive and has kept good control of administrative costs, showing a lower cost than the PIA Profit Leaders.

	PIA Profit Leaders	Printemps	Variance
Total Administrative Expenses	7.97%	7.15%	0.82%

Some expenses that can be controlled in the Administrative area include office supplies and expenses, postage and telephone. These items should be monitored for effective purchasing and usage.

Bad debts are another area where management can improve results. One way to do this is to establish sound credit and collection policies, and see to it that those policies are followed.

Most administrative expenses are not significantly affected by changes in production or sales. The manager should try to determine if, overall, Administrative Expenses can be justified in terms of efficient operations.

Selling Expenses

Printemps' Selling Expenses also are low compared to PIA Profit Leaders.

	PIA Profit Leaders	Printemps	Variance
Total Selling Expenses	8.58%	6.57%	2.01%

This variance may not be as favorable as it appears. It may indicate that Printemps is not spending enough time and money to promote its products and to increase sales. There is one selling executive, four salesmen and one sales office person. Obviously, the president of the company also does some selling.

Interest Expense And Other Income

Printemps compares with PIA Profit Leaders in this area as follows:

	PIA Profit Leaders	Printemps	Variance
Interest Expense	1.06%	2.57%	(1.51)%
Other Income	1.05	1.59	0.54

Printemps' Interest Expense is high. Besides having fairly large long-term notes used to finance equipment, the company has been forced to seek some short-term working capital financing at high interest rates. It would be wise for it to improve its cash flow so that these short-term notes could be kept to a minimum. Proper planning and more efficient billing and collection procedures would help speed the cash flow.

In periods of falling interest rates such as we have been presently experiencing, printing management would do well to look into refinancing its indebtedness, both long-term and short-term.

Banks are not partners. They are in the business of selling money, and can be very competitive, especially in attracting new accounts. A printer can improve his profitability by seeking the best possible credit terms, and by regularly reviewing the credit terms available to him among competing lending institutions.

Other Income from outside separation work, mentioned earlier, helps Printemps' Income Before Income Taxes look better. Printers who do not have a cash flow problem would be wise to invest idle funds so that interest income can be generated.

The Bottom Line

We have barely scratched the surface in this brief example. In examining variances, it is often helpful to look at other parts of the PIA Ratio Study for more in-depth understanding. For example, when analyzing Direct Wages, an examination of the Significant Facts tables will show average wages in a particular sales range per employee. Managers should examine and analyze the Balance Sheet and Return on Investment sections together with the Operating Statement in order to get a full picture of a company's performance, compared to PIA Profit Leaders.

Once you have compared your results — all your results -- with industry standards for the current year, and have identified the differences, you have the basis to plan and set objectives for the future. Proper understanding of the Ratio Study and diligent commitment on your part should result in improved operations. You already know how well you did last year. The next question is, "How can I do better next year?"

REPORT ON OPERATIONS - SALES = 100%

	SALES FROM $5,000,000-$10,000,000		PRINTEMPS	
	ALL FIRMS	PROFIT LEADERS		
	%	%	$	%
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	$7,000,000	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	25.07	23.97	2,083,200	29.76
Other chargeable materials	5.31	4.52	543,900	7.77
Outside services	8.25	8.16	414,400	5.92
TOTAL MATERIALS	38.63	36.65	3,041,500	43.45
FACTORY PAYROLL	26.08	23.64	1,909,600	27.28
FACTORY EXPENSES	12.64	11.83	939,400	13.42
TOTAL FACTORY COST OF PRODUCT	77.35	72.12	5,890,500	84.15
GROSS PROFIT	22.65	27.88	1,109,500	15.85
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	8.40	7.97	500,500	7.15
Selling expenses	8.93	8.58	459,900	6.57
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	17.33	16.55	960,400	13.72
INCOME BEFORE INTEREST EXPENSE	5.32	11.33	149,100	2.13
Interest Expense	1.94	1.06	179,900	2.57
OPERATING INCOME (LOSS)	2.38	10.27	(30,800)	(0.44)
Other income	0.68	1.05	111,300	1.59
INCOME BEFORE INCOME TAXES	4.06%	11.32%	$ 80,500	1.15%

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS	PRINTEMPS	
	%	%	$	%
OTHER CHARGEABLE MATERIALS				
Ink	1.73%	1.27%	$ 105,000	1.50%
Film	1.12	0.80	225,400	3.22
Plates	1.17	1.00	142,100	2.03
Other chargeable materials	1.29	1.45	71,400	1.02
TOTAL OTHER CHARGEABLE MATERIALS	5.31%	4.52%	$ 543,900	7.77%
OUTSIDE SERVICES				
Composition	0.58%	1.18%	$ 28,000	0.40%
Offset preparation	1.37	0.93	14,000	0.20
Printing	1.52	2.41	99,400	1.42
Binding	2.66	2.27	220,500	3.15
Other outside services	2.12	1.37	52,500	0.75
TOTAL OUTSIDE SERVICES	8.25%	8.16%	$ 414,400	5.92%
FACTORY PAYROLL				
Salaries - executive	1.83%	1.88%	$ 177,800	2.54%
Direct wages	17.16	15.74	1,318,800	18.84
General factory salaries and wages	2.07	1.55	111,300	1.59
Packing, shipping and delivery wages	0.85	0.84	38,500	0.55
Payroll taxes	1.72	1.45	117,600	1.68
Employee benefits	2.45	2.18	145,600	2.08
TOTAL FACTORY PAYROLL	26.08%	23.64%	$1,909,600	27.28%
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.20%	0.21%	$ 19,600	0.28%
Depreciation - other	3.46	3.47	322,700	4.61
Taxes - real estate	0.20	0.21	13,300	0.19
Taxes - other	0.20	0.12	11.200	0.16
Insurance	0.49	0.47	64,400	0.92
Building rent	1.16	1.01	-	-
Utilities - heat, light, etc.	1.19	1.06	98,700	1.41
Equipment rental	0.55	0.13	4,900	0.07
Total Fixed Expenses	7.45	6.68	534,800	7.64
Other Expenses				
Factory supplies and expense	2.01	1.86	167,300	2.39
Packing, shipping and delivery expense	1.05	1.05	64,400	0.92
Repairs and maintenance	1.45	1.52	150,500	2.15
Other factory expenses	0.68	0.72	22,400	0.32
Total Other Expenses	5.19	5.15	404,600	5.78
TOTAL FACTORY EXPENSES	12.64%	11.83%	$ 939,400	13.42%

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS %	PROFIT LEADERS %	PRINTEMPS $	PRINTEMPS %
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.41%	2.76%	$166,600	2.38%
Salaries - office	1.83	1.52	108,500	1.55
Payroll taxes	0.27	0.25	16,800	0.24
Employee benefits	0.58	0.43	35,700	0.51
Bad debts	0.49	0.40	22,400	0.32
Office supplies and expenses	0.35	0.33	24,500	0.35
Professional fees	0.56	0.53	29,400	0.42
Taxes - business	0.08	0.16	6,300	0.09
Telephone	0.41	0.35	32,900	0.47
Other administrative expenses	1.42	1.24	57,400	0.82
TOTAL ADMINISTRATIVE EXPENSES	8.40%	7.97%	$500,500	7.15%

	ALL FIRMS %	PROFIT LEADERS %	PRINTEMPS $	PRINTEMPS %
SELLING EXPENSES				
Salaries - executive	1.13%	1.25%	$ 84,000	1.20%
Salaries and commissions - salesmen	4.39	4.57	221,200	3.16
Salaries - sales office clerical	0.81	0.72	28,000	0.40
Payroll taxes	0.33	0.27	21,000	0.30
Employee benefits	0.41	0.45	19,600	0.28
Advertising	0.40	0.26	14,000	0.20
Travel and entertainment	0.72	0.61	60,900	0.87
Other selling expenses	0.74	0.45	11,200	0.16
TOTAL SELLING EXPENSES	8.93%	8.58%	$459,900	6.57%

THE BALANCE SHEET - HOW WE STAND

A balance sheet is a statement of a company's financial position at a specific time. It lists assets, liabilities and owners' equity. The term, "balance sheet," comes from the fact that its two sides must balance or be equal. The balance sheet equation may take one of two forms:

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

OR

$$\text{Assets} - \text{Liabilities} = \text{Owners' Equity}$$

A company's assets are everything the company owns. Its liabilities are everything it owes. Owners' equity is what is left after liabilities are subtracted from assets, and it represents the financial interest of the proprietor, partners or shareholder(s) -- whoever owns the company. Another term for owners' equity is "net worth," a term that is not used as commonly as it was in the past.

A good printing manager should understand the relationship of a balance sheet's components to company operations. Many aspects of a company's operational capabilities are revealed by an evaluation of its balance sheet. As with other financial data, an intelligent analysis can provide a unique management tool.

Keep in mind that particular ratios and relationships may differ according to the processes a printing company uses or what products it produces. For example, it is likely that a web-offset printer would have a greater investment in plant equipment and, correspondingly, more liabilities (debt) or equity (owners' financial interest) to support those assets than a sheetfed printer.

By using the following analysis as a guide, you should be able to compare your own firm's financial position to that of the industry and Profit Leaders. Our example is the balance sheet of our imaginary company, Printemps, which we will compare to the sample PIA ratio balance sheet on page 49.

ASSETS - THE PRINTER'S INVESTMENT

How many dollars in assets should we invest to produce X dollars in profit? As any businessman knows, this is a difficult question to answer. Return on Investment (ROI), a measure of profitability that is just as important as Profit on Sales, has been defined as income divided by assets.

$$\text{ROI} = \frac{\text{Income}}{\text{Assets}}$$

There are only two ways to increase ROI: either increase income or decrease assets.

In our analysis of Printemp's balance sheet, our goal will be to ensure the efficient income-producing management of the company's assets. We also will look for ways to reduce assets without affecting income. As the above formula indicates, both goals will lead to higher Return on Investment (ROI).

Because printing is a highly capital-intense industry, there are many types of assets involved. These are normally classified as Current Assets, Fixed Assets, and Other Assets. Added together, these comprise Total Assets. We will examine each type of asset as it relates to printing.

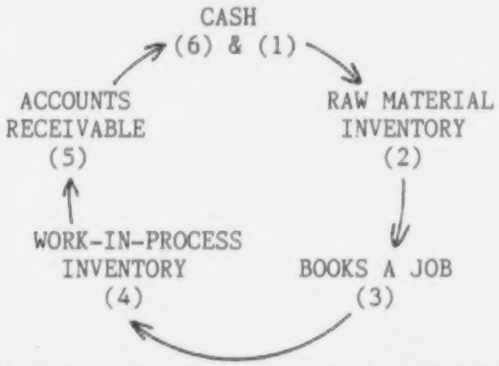
CURRENT ASSETS - THE PRINTER'S LIQUIDITY

Traditionally, Current Assets are listed on the balance sheet in their order of liquidity. They may be referred to as a company's liquid assets -- assets that can be converted quickly into cash, usually within a one-year period. A printer uses these assets to pay his bills or other debts as they come due.

Current Assets follow a circular pattern during the year, continuously being used up and replaced. For the average printer, this process takes place many times a year.

The typical trading cycle follows this pattern:

(1) A company starts with cash.
(2) Next, it purchases raw materials -- paper, ink, film, etc.
(3) Then it books a job and
(4) puts costs and materials into work-in-process.
(5) When the job is completed and shipped, it is then billed to the customer. The cost of the job is then removed from the work-in-process inventory and the billed amount becomes an account receivable.
(6) Finally, the customer pays the bill and the account receivable is converted back into cash and the cycle starts anew.



ONE OF THE KEYS TO GREATER PROFIT IS TO SPEED UP THE TRADING CYCLE, MINIMIZING THE TIME INVOLVED FOR EACH CYCLE. THE MORE CYCLES PER YEAR, THE MORE PROFIT GENERATED.

TURNOVER

Turnover is the time it takes to complete one trading cycle. Turnover that is as fast as possible, consistent with quality standards, is a sound management principle. But it seems to conflict with some printers' practices. Too often production, estimating and sales personnel seek extra time to do a job, even though the faster the job is done, the better the turnover. If management wants to increase its profits, it must insist that the trading cycle be completed as quickly as possible -- and manage its personnel to see that this policy is adhered to.

Two ratios are critical in analyzing the movement or rapidity of the cycle. These are inventory turnover and the collection period of receivables. It is imperative that printers understand how these two ratios operate and try diligently to improve them. Time after time, printing companies that have been sliding down the profit line have climbed back up to a healthy position by improving their turnover.

For example, one printing company forced into heavy short-term debt several years ago analyzed its operations only to discover that the collection period for receivables was approaching 63 days. After management installed tighter credit policies and began to monitor collection procedures more closely, it took only a short time to reduce the collection period to 50 days and eliminate a major portion of the short-term debt.

Let's now analyze each current asset, generally, and then more specifically to see how Printemps' ratios compare to the industry as a whole.

CASH

There is no firm rule about the amount of cash a company should have on hand. The only thing certain is that having either too much cash or too little cash is likely to cause problems. A profitable company will have a surplus of cash after expenses. Conversely, a company facing financial loss will be pushed into using whatever cash it has to cover expenses. Also, a printing company that is growing or expanding will need more cash for plant investments and debt commitments, and for building sufficient inventories than will a company that is well established.

Historically, Profit Leaders maintain approximately 10% of their total assets in cash. Your company may need more or less, depending on its present situation.

CASH CONTROL

Cash control is particularly important to a printer because almost every transaction will eventually result in either receiving or disbursing cash. Because cash can be concealed and is liquid, it can be stolen or misappropriated more easily than any other asset. Keep in mind that theft and embezzlement have always been done by "trusted" employees or executives. Therefore, it is vital for management to maintain adequate control and accountability for its cash. The printing manager must see that the following procedures are carried out:

1. Cash is recorded and deposited promptly after receipt.
2. All disbursements are made by check. (It is common for printers to have a petty cash fund for small expenditures that would be impractical to pay by check. Just make sure the expenditures are small.)
3. Employees handling cash should have their tasks divided. They also should be bonded. For example, the person preparing invoices should not make bank deposits or handle receipts. The person writing checks should not reconcile bank statements.

At first glance, it may appear that Printemps has a serious cash deficiency. A comparison with the PIA Ratio Study shows 8.04% less cash than the Profit Leaders. Further analysis reveals that if both cash and receivables are totaled, the difference between Printemps and the Profit Leaders is 5.50%. Printemps' cash as a percentage of total assets may point to a low receivable turnover and an inability to retain cash.

PERCENTAGE OF TOTAL ASSETS

	Profit Leaders	Printemps	Variance
Cash	14.54%	6.50%	(8.04)%
Accounts Receivable	29.28	31.82	2.54
TOTAL	43.82%	38.32%	(5.50)%

ACCOUNTS RECEIVABLE

There may be some reason for concern about Printemps' accounts receivable percentages. Remember, the balance sheet shows a company's financial picture only at a fixed point in time. It is possible that the accounts receivable are lower at other times in the sales year. But year after year, PIA Ratios have shown that firms like Printemps have a higher ratio of receivables to total assets on their balance sheets than do Profit Leaders. It appears logical to assume that the higher the sales, the larger the receivable balance. If a company's sales are increasing, there would be no cause for alarm. But usually that is not the case. High receivables may not be bad, but their cause should be investigated.

Among the possible reasons for higher accounts receivable is the tendency of many printers to rush "work-in-process" to completion at the end of the fiscal year so that the completed work will boost the "sales" category in their balance sheets. It also should be noted that web and sheet-fed printers who have long-run jobs may not be paid until the job is completed. When dealing with advertising agencies, printers may have to wait until the agency receives payment from its clients. In both instances, the wait can be long and costly, with high accounts receivable and slow cash collection periods.

PROMPT CASH COLLECTION

Let's go further into accounts receivable ratios. The time it requires to collect cash from customers after sales are made is referred to as the collection period of accounts receivable. The ratio between Printemps and Profit Leaders indicates how effective their collection procedures are. The sooner receivables are collected, the sooner the money can be put to use -- to invest in more assets, to pay off liabilities, or to earn interest. As the collection period increases or decreases, it affects a company's cash, receivables, inventory, payables, and interest; in other words, it affects the company's entire operation.

The collection period is computed by dividing the average accounts receivable by the annual sales figure, and then multiplying the result by 365.

$$\text{COLLECTION PERIOD OF RECEIVABLES} = \frac{\text{AVERAGE ACCOUNTS RECEIVABLE}}{\text{ANNUAL SALES}} \times 365$$

This ratio reflects a company's credit and collection policies. Most printing firms have about one-sixth or 16.6% of their annual sales in accounts receivable. For example, if sales were $2,500,000, a typical firm would have $415,000 outstanding. Shortening the collection period reduces that portion of assets that are tied up in receivables and related interest costs.

PROFIT LEADERS	59.7 days
PRINTEMPS' COLLECTION PERIOD OF RECEIVABLES	68.0 days

Printemps' collection procedures need improvement to compare favorably with Profit Leaders. A collection period of 68.0 days is much too long. All printers, including Profit Leaders, should make every possible effort to shorten collection periods. Some ways to do this are:

1. BILL CUSTOMERS AS SOON AS THE JOB IS COMPLETED, not at the end of the month as many printers do.
2. Offer effective incentives for customers to pay on time.
3. Seek good, credit-worthy customers.
4. If good customers are consistently slow paying, take into consideration the cost of maintaining large accounts receivable balances when pricing their work.

Usually a small percentage of a company's accounts receivable will not be paid and thus become bad debts. To show a more accurate picture of what actually will be collected, accounts receivable appear on the balance sheet offset by an allowance for estimated losses.

AVERAGE RECEIVABLES

Although in most cases there is little difference between credit sales and total sales in the printing industry, the ratio of the collection period for receivables should be calculated using only credit sales. Printers, with the exception of quick printers, rarely have cash sales. "Average receivables" is the sum of beginning-of-the-year receivables and end-of-the-year receivables divided by two:

$$\frac{\text{BEGINNING ACCOUNTS RECEIVABLE PLUS ENDING ACCOUNTS RECEIVABLE}}{2}$$

A better average may be derived by using the beginning of the year balance plus the end of each month's balance, divided by thirteen. The better an average you can calculate, the more accurate your collection period computation will be.

INVENTORY

A printer's inventory is the sum of work-in-process, paper and other chargeable materials and supplies. Finished goods inventory may be small or non-existent because the majority of a printer's sales are specialized, produced "to order" jobs.

While inventory may, at first glance, appear to be a simple and straightforward concept, inventory valuation methods vary among printers. The amount of a firm's inventory changes depending on the method used (FIFO, LIFO, etc.). Management must decide which practice is best for them.

Printemps' inventory represents 19.21% of its total assets, or 7.06% more than the Profit Leaders' inventory. It may or may not be carrying excessive inventory in stock. Either way, it should keep a perpetual inventory system. In addition, it should control and safeguard its inventory by taking a monthly physical count. Printemps' manager should make sure there are sufficient funds to pay current liabilities and that too much cash is not tied up in inventory.

Earlier, inventory turnover was cited as a critical ratio for improving a printer's trading cycle and increasing profits. The equation is:

$$\frac{\text{COST OF MATERIALS SOLD}}{\text{AVERAGE INVENTORY}} = \text{INVENTORY TURNOVER}$$

Profit Leaders	Printemps
4.00	3.34

The cost of materials sold is taken from the income statement, including paper and other chargeable material costs. Outside services, such as binding, are not included because they have no effect on inventory.

In those instances where customers supply paper, inventories will fluctuate and will possibly affect a printer's comparison of his inventory percentages to those in the Ratio Study. Parenthetically, when customers supply paper, a printer should still make a realistic handling and overhead charge for paper to cover his labor and warehousing costs, plus a profit mark-up.

Some financial analysts use sales of materials rather than the cost of materials in computing turnover. Since printers value inventories at cost, cost of materials sold gives a more accurate figure in calculating the ratio. Using the monthly average inventory is particularly important for printers because of the significant volume changes during the year. While a monthly inventory is, by far, the most highly recommended practice, some printers take inventory less often. If this is the practice in your plant, use the average annual inventory to calculate the ratio.

A low inventory turnover points to the possibility of a larger than necessary investment in inventory. A higher turnover implies better management and control. Printemps seems to be managing its inventory well.

WORK-IN-PROCESS TURNOVER

Managing work-in-process offers the greatest opportunity to improve inventory turnover. Profit potential is greater when a job is quickly shipped out of the plant, and rapid processing also enhances the company's capital position because less cash is tied up in inventory.

The formula for work-in-process turnover is:

$$\text{WORK-IN-PROCESS TURNOVER} = \frac{\text{COST OF PRODUCT PRODUCED (MATERIALS, LABOR, OVERHEAD)}}{\text{AVERAGE WORK-IN-PROCESS INVENTORY}}$$

Some printers have a fast turn-around from the time an order is put into production to its finished state. These firms will have less work-in-process. Other printers, because of the nature of their work, have a much longer production cycle and will have a significantly higher work-in-process inventory.

PAPER AND OTHER CHARGEABLE MATERIALS INVENTORY

Paper and other chargeable materials represent a substantial part of a printers' inventory. Inventory turnover improves when inventory levels are optimized and the storage time of materials (primarily paper) prior to production is reduced.

$$\frac{\text{PAPER USED}}{\text{AVERAGE PAPER INVENTORY}} = \text{PAPER INVENTORY TURNOVER}$$

$$\frac{\text{OTHER CHARGEABLE MATERIALS USED}}{\text{AVERAGE OTHER CHARGEABLE MATERIALS INVENTORY}} = \text{OTHER CHARGEABLE MATERIALS INVENTORY TURNOVER}$$

OTHER CURRENT ASSETS

Other current assets seldom play a significant role in ratio analyses because the percentages are usually small. Other current assets include various prepaid expense categories such as insurance, taxes, etc.

PROPERTY, PLANT AND EQUIPMENT

As mentioned before, printing companies must maintain a very high capital investment. New machinery costs are soaring. In many cases, used equipment is selling at prices close to the original new equipment price tag. As a result, equipment usually makes up a large portion of a company's assets. These assets are not for sale but are used in the operation of the plant. Property (with the exception of land), plant and equipment are depreciated over a period of time. Methods of depreciation vary; a printer usually uses one method of depreciation for tax purposes and another method for financial reporting or book purposes.

For book purposes, a printer may depreciate assets using the straight-line method over the estimated useful life of the asset. For tax purposes, printers may use the accelerated cost recovery system (ACRS) percentages as well as other methods to depreciate buildings and improvements, furniture and fixtures, machinery and equipment, and delivery vehicles.

	Profit Leaders	Printemps
NET PROPERTY, PLANT AND EQUIPMENT	37.47%	39.12%

Printemps' property, plant and equipment percentage is higher than that of the Profit Leaders. These percentages may vary considerably among different types of printers and different circumstances. For example, it may be advantageous for one printer to own his plant, while another printer living in a region with different real estate costs may be better off leasing his space. Machinery and equipment percentages may also vary widely depending on the processes each printer uses.

More important than the percentage of fixed assets owned, Printemps' manager should consider the following:

1. Is equipment being operated at capacity?
2. Is the company using outdated, inefficient equipment?
3. Can extra space held for future expansion be temporarily leased?

OTHER ASSETS

Other assets are usually those which will not be converted into cash within a period of one year. They may include deposits on equipment, the cash surrender value of officers' life insurance, and goodwill. Generally, other assets are not a significant part of the balance sheet.

LIABILITIES AND EQUITY

The liability and equity section of the balance sheet shows how each dollar of assets is distributed:

LIABILITIES ($) ----------> OBLIGATIONS

EQUITY ($) ----------> OWNERSHIP

Liabilities are divided into current and long-term liabilities. First we will examine Printemps' current liabilities, and then discuss its long-term liabilities.

CURRENT LIABILITIES

Current liabilities usually are obligations that fall due within a period of a year and are paid out of current assets. They include obligations generated by the operating cycle, such as money owed to vendors for materials and supplies, sales billed in advance of delivery, employees' salaries, interest, the current portion of principal payments due on notes, income taxes, and any other payable which is due in the next operating period.

	Profit Leaders	Printemps	Variance
Notes Payable	4.89%	15.20%	(10.31)%
Accounts Payable	11.26	17.26	(6.00)
Other Current Liabilities	8.79	10.02	(1.23)
	24.94%	42.48%	(17.54)%

It is obvious that Printemps has too much short-term debt. If the accounts receivable collection period is too long, as we have previously calculated, a situation may arise where Printemps does not have sufficient cash to pay its short-term creditors promptly.

Other current liabilities may include payroll taxes due, employees' withholding taxes, sales tax collected, accrued expenses such as interest, business taxes, payroll and vacation payroll, income taxes payable and others.

One current liability that printing firms often handle poorly is "Advance Collections." The following example shows how this account should be used.

A customer may ask for an advance billing, and the printer lists this as an Accounts Receivable and an Advance Billing account in his records. If this situation still exists at the Balance Sheet date, the original entry should be reversed and neither Accounts Receivable nor Advance Billing appear on the Balance Sheet.

When the customer pays, only the account "Advance Billing" is left, because the corresponding Receivable has been paid. In this case, it is necessary to reclassify the Advance Billing that has been paid as an Advance Collection. This Advance Billing situation occurs in many printing companies. Proper accounting is important.

DEFERRED INCOME TAXES

Deferred income taxes arise when income and expense items are reported for financial accounting and tax purposes in different time periods. For the majority of printing firms the principal difference is the use of accelerated depreciation for tax purposes. Generally accepted accounting practices require that taxes are provided on book profits, the amount of current tax is reduced and the balance is deferred.

LONG-TERM DEBT

Long-term debt provides a major source of funds to finance a printer's assets. It includes debt that will be paid some time beyond the current period (a firm's 12-month financial or operating year). Most of a printer's long-term debt is in the form of bank loans, mortgages or leases. Some large printers may issue bonds.

	Profit Leaders	Printemps	Variance
Long-Term Liabilities	19.25%	25.32%	(6.07)%

Again, Printemps' ratios show that it has too much debt. Perhaps Printemps' management has not pursued better financing methods. Has management considered issuing additional capital stock to obtain funds? Will Printemps be able to meet its financial obligations when they become due?

EQUITY

A company's equity is the amount of investment the owners have made in the company. The term "Proprietor's Equity" refers to the investment a single owner has in his unincorporated business. "Shareholders' Equity" is used when speaking of a corporation because corporations issue common stock. The owners of the common stock are the shareholders. The term "Partners' Equity" is used for a partnership. This discussion will be about "Shareholders Equity" because most printing firms are corporations.

Shareholders' Equity may include the following accounts:

Common Stock
Preferred Stock
Additional Paid-in Capital
Retained Earnings
Treasury Stock

CONTRIBUTED CAPITAL

The term "capital stock" is sometimes used to designate all of a corporation's issued stock, both common and preferred. The capital stock value is computed by multiplying the par value (original face value) of each share by the number of shares issued.

For example, if Printemps issued 2,500 shares of common stock and the par value is $10 per share, the total dollar value of common stock would be $25,000. (2,500 shares X $10 a share = $25,000.)

Stock does not have to be issued at par value. If shares are sold at a price higher than par, the additional funds received will appear as "Additional Paid-In Capital" on the balance sheet.

Preferred stock is another type of security a company may issue to raise funds. Issuing preferred stock is optional and many companies do not issue this kind of security.

RETAINED EARNINGS

Retained earnings are a company's accumulated profits (and losses) that have not been paid out to shareholders as dividends. The earnings are reinvested in the company in the form of assets (cash, accounts receivable, inventories, property, plant or equipment, etc.).

DEBT/EQUITY STRUCTURE

Printemps' percentage of Shareholders' Equity to all debt and equity is 32.20%. Its total debt percentage is 67.80%. The Profit Leaders' ratios are reversed -- their shareholders' equity percentage is higher than their debt percentage.

	Profit Leaders	Printemps
Total Liabilities	44.19%	67.80%
Shareholders' Equity	55.81	32.20

Many factors make it difficult to pinpoint the perfect debt/equity structure of a printing company -- the form of operations, the company's financial goals, the company's cost of capital, interest rates, etc. However, printing industry trends show that Profit Leaders consistently have a larger percentage of equity than debt.

TOTAL EQUITY AS A PERCENTAGE OF DEBT AND EQUITY

	PIA Ratio Studies*					
	1987	1986	1985	1984	1983	1982
All firms	38.03%	37.84%	37.17%	39.32%	41.55%	42.18%
Profit Leaders	54.17	53.23	50.42	55.25	57.89	54.88

* These ratios are from all firms reporting.

BALANCE SHEET

	PIA HIGH PROFIT STANDARDS ($5,000,000-$10,000,000)	PRINTEMPS		
	% OF TOTAL ASSETS	DOLLARS	% OF TOTAL ASSETS	DIFFERENCE MORE (LESS)
ASSETS				
CURRENT ASSETS				
Cash	14.54%	$ 266,500	6.50%	(8.04)%
Receivables	29.28	1,304,620	31.82	2.54
Inventories	12.15	787,610	19.21	7.06
Other current assets	4.08	65,600	1.60	(2.48)
TOTAL CURRENT ASSETS	60.05	2,424,330	59.13	(0.92)
PROPERTY, PLANT AND EQUIPMENT				
Real estate	10.71	1,150,050	28.05	17.34
Less: Accumulated depreciation	3.88	534,230	13.03	9.15
	6.83	615,820	15.02	8.19
Machinery and equipment	63.68	2,103,300	51.30	(12.38)
Less: Accumulated depreciation	34.93	1,154,150	28.15	(6.78)
	28.75	949,150	23.15	(5.60)
Other fixed assets	4.86	209,100	5.10	(0.24)
Less: Accumulated depreciation	2.97	170,150	4.15	1.18
	1.89	38,950	0.95	(0.94)
NET PROPERTY, PLANT AND EQUIPMENT	37.47	1,603,920	39.12	1.65
OTHER ASSETS	2.48	71,750	1.75	(0.73)
TOTAL ASSETS	100.00%	$4,100,000	100.00%	0.00%
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	4.89%	$ 623,200	15.20%	10.31%
Accounts payable	11.26	707,660	17.26	6.00
Other current liabilities	8.79	410,820	10.02	1.23
TOTAL CURRENT LIABILITIES	24.94	1,741,680	42.48	17.54
LONG-TERM LIABILITIES	19.25	1,038,120	25.32	6.07
TOTAL LIABILITIES	44.19	2,779,800	67.80	23.61
SHAREHOLDERS' AND PROPRIETORS' EQUITY	55.81	1,320,200	32.20	(23.61)
TOTAL LIABILITIES AND EQUITY	100.00%	$4,100,000	100.00%	0.00%

INTERRELATED RATIOS OF THE BALANCE SHEET

We will now examine ratios that relate to both sides of the balance sheet and, when evaluated with other ratios, offer significant information to the printing manager. Some ratios will include factors from both the operating statement and the balance sheet. These ratios provide the best information about the financial health of a company, if they are viewed together.

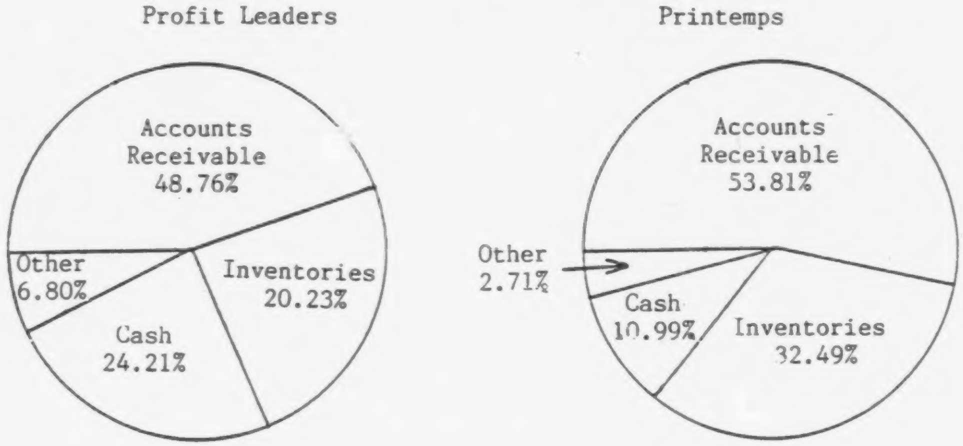
Four types of ratios will be used to analyze Printemps' financial position.

Type of Ratio	What It Does
1. Liquidity	Measures Printemps' capability to meet short-term obligations.
2. Activity	Measures Printemps' effectiveness in using its assets.
3. Leverage	Measures Printemps' ability to meet short-term and long-term debt.
4. Profitability	Indicates Printemps' return on assets.

LIQUIDITY RATIOS OF WORKING CAPITAL

Adequate working capital is necessary for a company to meet current debts, carry sufficient inventories and take advantage of cash discounts.

WORKING CAPITAL
PERCENT OF CURRENT ASSETS



Profit Leaders

Printemps

These charts show that Profit Leaders have proportionately more cash and less receivables and inventory than Printemps.

Working capital is the difference between current assets and current liabilities. Printemps' working capital in dollars is $682,650.

Current Assets	$2,424,330
Current Liabilities	1,741,680
- Difference - Net Working Capital	$ 682,650

Is $682,650 enough working capital for smooth operations at Printemps? Does Printemps have enough liquidity or too much? Does Printemps have too little cash? The following two ratios give us insight to the liquidity question.

> CURRENT RATIO - The current ratio measures a company's ability to meet short-term obligations, thus playing a key role in determining whether there is adequate working capital. It is computed by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Profit Leaders	Printemps
2.41	1.39

Printemps' ratio of 1.39 means that for every dollar of current liabilities, there is $1.39 in current assets. Historically, Profit Leaders have had current ratios above 2.0, and this has been considered satisfactory. Although many firms functioned well in the past with a lower ratio, today's companies tend to have longer inventory conversion periods and longer collection periods for accounts receivable.

Printemps' current ratio of 1.39 may indicate a cash shortage. There seems to be inadequate cash to pay short-term debts, a situation that needs immediate improvement. On the other hand, a very high current ratio might indicate that a printer is not using funds wisely. When current ratios are high, the company's assets may be used elsewhere more effectively, perhaps by buying additional machinery and equipment to expand or improve operations.

Some people say that doing business with other people's money, "trading on equity," is good business. This is rarely true. If the current ratio is lowered by too much debt, assets such as inventory and cash will not be available when needed.

Also, when working with an excessive amount of other people's money, a demand for cash repayment of the loan can prevent a printer from investing current assets profitably in his own business. It can prevent him from buying and discounting, and can affect his credit with banks which, in turn, can hinder the purchase of fixed assets. In short, working with other people's money makes the lender a partner who is mainly concerned with his money and interest, not your business.

QUICK RATIO - A better liquidity ratio is the quick ratio, also called the acid test ratio. The quick ratio differs from the current ratio because it eliminates inventories from Current Assets (the numerator). This is done because inventories are the least liquid of current assets, and sometimes distort the analysis. The formula for the quick ratio is:

$$\text{Quick Ratio} = \frac{\text{Current Assets Minus Inventory}}{\text{Current Liabilities}}$$

Profit Leaders	Printemps
1.92	0.94

Again Printemps shows the same weak position as in the current ratio since its inventories are high.

ACTIVITY RATIOS

Activity ratios indicate the effectiveness with which a company uses its assets. Inventory turnover and the collection period of receivables are Activity Ratios that were discussed previously.

LEVERAGE RATIOS

Leverage ratios reflect a company's total debt -- short-term and long-term. This ratio is important to a printing manager, particularly if his company is expanding and needs debt financing. He will want his company's leverage ratios to compare favorably with those of the printing industry. This is a factor that lending institutions will look at closely because it measures the relationship between shareholders' funds and borrowed funds.

Printers should consider the two debt-to-equity ratios analyzed below:

		Profit Leaders	Printemps
1.	$\frac{\text{Total Liabilities}}{\text{Equity}} =$	0.79	2.11
2.	$\frac{\text{Long-Term Liabilities}}{\text{Equity}} =$	0.34	0.79

The first debt to equity ratio shows that for every dollar in shareholders' equity, Printemps has $2.11 in liabilities. Profit Leaders, on the other hand, have only $0.79 in liabilities per shareholder dollar. It's hard to say what the perfect combination should be. Interest and principal payments usually make the use of borrowed funds riskier than the use of ownership funds. Dividends to shareholders are usually at the discretion of corporate directors and invested capital does not have to be repaid.

The second leverage ratio measures the proportion of long-term debt to equity. Again, no one can say what the acceptable ratio is for a particular company. The ratio for Printemps is 0.79 and for the Profit Leaders it is 0.34. Generally, the ratio has been rising steadily for all firms, and has been slowly decreasing for Profit Leaders. This trend seems to indicate that the Profit Leaders are becoming more financially secure, and that printing managers should try to obtain shareholders' equity as a source of funds.

It is clear, however, that Printemps' ratios are too high in both of these areas. They are highly leveraged and any adverse business climate could create substantial problems in the area of debt repayments.

PROFITABILITY RATIOS

Most of the profitability ratios are dealt with in the income statement. However, one major profitability ratio measures how effectively the company's investment (see balance sheet) has been used to produce that profit. This ratio is called the Return On Investment (ROI) and is discussed in a later section.

MEANING OF SIGNIFICANT FACTS

Significant facts in these ratios are particularly important statistics for printers. They are as meaningful as financial statements. Often, they offer the lowest common denominator which can be easily managed to produce higher profits.

INVESTMENT

Our objective in this section is to analyze assets used per employee. From the information found in the significant facts section, you will see that High Profit companies consistently invest more assets per employee. As sales volume increases, assets invested per employee also increase. Significant facts related to investment are defined and explained below.

Assets per Employee - All Employees = $\frac{\text{Assets (Net)}}{\text{Number of All Employees}}$ = This ratio includes all assets -- current, fixed (net of depreciation), and others. It indicates the adequacy of the funds employed.

Assets per Factory Employee = $\frac{\text{Assets (Net)}}{\text{Number of Factory Employees}}$ = This ratio is similar to the one above, but shows assets per factory employee.

Average Net Worth per Employee = $\frac{\text{Shareholders' Equity}}{\text{Number of All Employees}}$ = This figure tells what part of the first ratio (assets per employee) is funded by shareholders' investment.

Average Gross Plant Investment per Factory Employee = $\frac{\text{Plant Machinery and Equipment (Gross)}}{\text{Number of Factory Employees}}$ = This is a "key fact". It is obvious that the trend is toward more equipment per factory employee.

Net Worth Percentage of Fixed Assets = $\frac{\text{Shareholders' Equity}}{\text{Fixed Assets (Net)}}$ = This ratio indicates the relationship between funding fixed assets and shareholders' equity. Fixed assets should never be funded with current debt, but with long-term debt and shareholders' equity. This equity should also fund about 50% of all assets -- an indication of funding strength.

SALES

These ratios provide information on sales per employee. They are given twice; once including executives and then without the executives. Here we will discuss statistics which exclude executives. The following formulas are particularly interesting:

Sales per Employee	=	$\frac{\text{Sales}}{\text{Number of All Employees}}$	=	This is an invaluable number. The only better ones are the two ratios below.
Sales per Factory Employee	=	$\frac{\text{Sales}}{\text{Number of Factory Employees}}$	=	This is a refined number of sales produced per factory employee.
Sales Less Materials per Factory Employee	=	$\frac{\text{Sales Less Materials}}{\text{Number of Factory Employees}}$	=	This ratio is the Value Added per factory employee -- one of the most important ratios in the Ratio Study. You must know this number and plan to improve it; the end result will be improved profit.

EMPLOYEE DISTRIBUTION

This part of significant facts presents the distribution of employees by department on a percentage basis. For example, for all firms reporting in the PIA Ratio Study, the distribution is:

Factory	74.10%
Administrative	13.84
Sales	12.06
	100.00%

The most important element here is the percentage of factory employees. A firm with a disproportionate high number of factory employees and relatively too few administrative and sales employees is rare. Factory employees produce the product and their productivity generates revenue.

Often, a very simple analysis will provide an indicator of productivity. The question to ask is: Are there enough factory employees to produce the product, to support the overhead and provide a profit? This question may seem elementary, but in many cases the answer turns out to be a revelation.

Note that the percentage of factory employees is about 70% for very small firms, and rises to approximately 82% of all employees for the largest firms. Each sales class has a specific characteristic -- a very simple, but valid relationship. Significant facts will help you determine whether your firm has too many or too few employees for the amount of business you do -- and will point to possible weaknesses in your personnel structure.

SALES PER SALESMAN

This ratio is computed as follows:

$$\frac{\text{Sales Produced by Salesmen}}{\text{Number of Salesmen}}$$

To use this ratio properly, you must be very careful to refer to the PIA data that matches as closely as possible your firm's sales volume, product and process specialties.

In analyzing the significant facts section, we note that sales per salesman in a small firm is approximately $80,000. The figure rises to approximately $1,730,000 for firms with sales over $10,000,000. This rise occurs throughout sales classes.

You must zero in on your sales class and relate your figures to the product and process specialties in the other PIA books in this series. Data for publications printing will differ from that for commercial printing; data from web-offset companies will be different from sheetfed offset company data.

PAYROLL

Payroll statistics are computed in two ways. In the first way, data will include payroll taxes, fringe benefits and executive compensation. In the second way, payroll taxes, fringe benefits and executive compensation are excluded. Executive payroll will be carried as a separate section in the second category.

The first item is total payroll as a percentage of sales. This includes factory, administrative and sales payroll:

$$\frac{\text{All Payroll Costs}}{\text{Sales}}$$

This ratio is affected by a firm's size. Payroll as a percentage of sales shows a definite downward trend as the size of the firm increases.

The next ratio is factory payroll as a percentage of gross plant investment. It is computed as:

$$\frac{\text{Factory Payroll}}{\text{Machinery and Equipment (Gross)}}$$

On average, this ratio is 83%. That is, for every dollar of gross plant investment payroll costs are $0.83. This ratio requires careful evaluation because it doesn't necessarily tell the full story. If the company is fully equipped, a higher ratio would indicate a maximum use of equipment. However, even with inadequate plant facilities, it is possible to have a ratio greater than 83%. Again, careful evaluation is necessary to obtain correct answers.

Payroll per employee. This category provides a dollar amount of payroll per employee. This data is divided by factory, administrative and sales employee, and is presented for "All Firms" and "Profit Leaders" in each sales class.

Please note that, in some cases, Profit Leaders pay less per employee. However, don't think that higher profit is necessarily the result of lower payroll costs. While Profit Leaders have a lower relative payroll cost, we have established that the lower cost is related to a higher capital investment per employee and a greater Value Added per factory employee.

A separate subheading in this category deals with the payroll per executive compared to all employees, and then again, it is broken down in more detail per factory, administrative and sales executive.

PROFIT

Gross profit percentage is computed as follows: first, determine your gross profit (sales less the cost of goods manufactured). Then relate gross profit to sales.

$$\frac{\text{Gross Profit}}{\text{Sales}} = \text{Gross Profit as a Percentage of Sales}$$

	All Firms	
	All Firms	Profit Leaders
Gross Profit as a Percentage of Sales	23.23%	27.84%

Small and medium-sized firms require a higher gross profit percentage. In firms with up to about $10,000,000 in sales, the High Profit standard is approximately 27% of gross profit. For firms with sales greater than $10,000,000, the gross profit required becomes less because of relatively lower administrative and selling expenses.

Many printers search for a mystical formula to produce high profits. That formula need not be as mystical as they think. There really is a way to produce a higher gross profit which in turn leads to higher net profits. The sources of higher profit are in:

- Pricing
- Material costing and control
- Increased Value Added per factory employee
- Expense control

An excellent lowest common denominator with which to gauge your profit performance is the average gross profit per factory employee. It is computed as follows:

$$\frac{\text{Total Gross Profit}}{\text{Number of Factory Employees}} = \begin{array}{l}\text{Average Gross Profit}\\ \text{Per Factory Employee}\end{array}$$

Another interesting statistic is average net profit before taxes per employee. For All Firms, this figure is $2,943 as compared to $9,908 for Profit Leaders.

Income before taxes as a percentage of sales, for all printing firms, was 3.42%; Profit leaders earned 11.49%. The percentage for All Firms is much too low, representing a dismal 6.25% Return on Investment. High Profit firms realized 14.33% Return on Investment.

RETURN ON INVESTMENT

After your bills are paid, where do you put your excess cash? Most of us put it where we can get the highest return, consistent with safety. If, for example, you could get 8% on U. S. Treasury Bonds, you wouldn't be satisfied with a 6% return. Yet, the average printing firm produces only a 6% Return on Investment.

Return on Investment (ROI) refers to the capital used to produce income. It is a very simple computation:

$$\frac{\text{Income}}{\text{Assets}} = \text{Return on Investment (ROI)}$$

ROI Ratios: All Firms - 6.25%; Profit Leaders - 14.33%

Return on Investment (ROI) incorporates the two major factors in measuring profits -- income and investment. For this reason it is considered the most comprehensive measure of profitability. There often is disagreement as to whether net assets or gross assets should be used to compute ROI. A more detailed explanation is presented in GROSS ASSETS VS. NET ASSETS (page 60).

ROI is gaining more and more acceptance as a measure of profitability in printing companies. This is due to the fact that printing is a capital intense industry and printing firms generally have high fixed assets against which their profit performance is measured.

PIA is a strong advocate of the ROI concept and consistently urges that its members become familiar with it and use it to measure their company's performance. Since ROI was introduced in the 1967 PIA Ratio Books, the Individual Computer Printout has been expanded to include ROI, an entire annual PIA financial meeting has been devoted to the concept, and PIA conducted a special historical case study on ROI. This study revealed a decline in investment turnover and showed the effect of this decline on the ROI rate when there is not a corresponding increase in profit as a percentage of sales.

DEFINING RETURN ON INVESTMENT

The ROI ratio produces, as a percentage, an annual rate of return on assets used to produce income. It is the same as an annual interest rate that one would receive on a bond or other type of investment.

The simple ROI formula is a reduction of the following ratios:

$$\frac{\text{Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} = \text{ROI}$$

or,

$$\frac{\text{Income}}{\text{Assets}} = \text{ROI}$$

The first fraction is income as a percentage of sales (income divided by sales). This is the percentage which requires special attention to improve your ROI. We will discuss this further under the heading, "Return on Investment Dilemma."

The second fraction is called "investment turnover" or "asset turnover" (sales divided by assets).

Although in the original formula, "sales" in the denominator of the term, "income as a percentage of sales," and the "sales" in the numerator of "investment turnover" cancel out each other mathematically, it is important to consider these two fractions as dynamic elements in ROI management.

Here is an example of an ROI computation:

Sales	$1,000,000
Profit before Taxes	90,000
Assets	500,000

$$\frac{\$\ 90{,}000 \text{ Income}}{\$1{,}000{,}000 \text{ Sales}} \times \frac{\$1{,}000{,}000 \text{ Sales}}{\$\ 500{,}000 \text{ Assets}} = \text{ROI}$$

$$9\% \times 2 = 18\% \text{ ROI}$$

In the PIA Ratios, income is...

...income before interest expense, other income and taxes.

Assets are...

...gross assets employed before deduction of accumulated depreciation and amortization.

As these are not commonly used definitions, we will discuss them in more detail.

Income Before Interest, Other Income and Taxes. When we refer to income in the PIA Ratio Study we mean income before interest, other income and taxes. Other financial studies compute ROI on after-tax profit. Their reasoning is that taxes are expenses, just like any other expenses. However, since the amount of tax varies so widely from one situation to another, tending to distort any comparisons, computing ROI before taxes provides a more meaningful standard.

By using profit before interest expense, we are able to compare the Return on Investment from operations, excluding interest which is really a cost of raising capital. For example, if your Return on Investment is 18% and your cost of interest is 12%, it pays to borrow funds which will, in turn, produce a greater return. Conversely, it would not pay to borrow funds at an interest rate greater than your ROI. It becomes clear that if interest were deducted from gross profit before determining ROI, one could not make a valid comparison between ROI and the cost of capital.

Non-operating income and expenses normally are excluded from our calculations. It is important that you also remove non-operating assets from your investment figure.

DEPRECIATION

Some printers, for financial or tax reasons, compute depreciation by accelerated depreciation methods. This produces higher depreciation in the early years of an asset's life than does the straight-line method. If your company uses an accelerated depreciation schedule, the excess depreciation should be added back into profit in order to compute ROI.

Some people theorize that depreciation should not be deducted from income for ROI purposes because accumulated depreciation is not deducted from fixed assets in arriving at total investment or assets. However, this concept does not have too many advocates.

VALUATION OF ASSETS

There are four ways to look at asset-valuation bases:

- Gross Assets at Book Value - Assets are at their original cost without deduction for accumulated depreciation.

- Net Book Value - Assets are valued at original cost less accumulated depreciation.

- Replacement Value - This is the same as Gross Assets, but adjusted for the difference in their replacement cost.

- Market or Actual Cash Value - Similar to Net Book Value, but asset costs have been changed to reflect replacement cost less the proportional accumulated depreciation.

Each of these ways of valuing fixed assets has considerable merit. The Replacement Value and the Replacement Value less Accumulated Depreciation are approaches you may want to use on your own as they can be very meaningful, depending on your circumstances and objections. For internal management purposes use the most accurate value of your equipment that you can. In these PIA Ratio Studies, however, we are limited to determining ROI by Gross Assets at Book Value and Net Book Value.

GROSS ASSETS VS. NET ASSETS

ROI has substantially different results when computed on Gross Assets and on Net Assets. For a number of years, the PIA Ratio Studies have determined ROI based on Gross Assets. This is the so-called DuPont method, which has the advantage of alerting management when ROI begins to decrease and equipment needs to be replaced.

Under the Net Asset method, a higher ROI may justify continued use of existing equipment. The Gross Asset basis has its purpose, but it is not as accurate as the Net Asset method.

ROI based on Net Assets is computed as follows:

$$\frac{\text{Income Before Taxes, Interest, and Other Income or Expense}}{\text{Assets Less Accumulated Depreciation}}$$

For "All Firms", this is 9.18%; for "Profit Leaders", 20.18%.

The net asset method may produce a more valid operational ROI and a more accurate computation.

WHAT IS A FAIR ROI?

The "All Firms" ROI of 6.25% on gross assets and 9.18% on net assets is hardly adequate to justify investment. The "Profit Leaders" ROI is 14.33% on gross assets and 20.18% on net assets. High-profit companies appear to achieve an ROI more commensurate with the economic risk.

There are substantial risks in the printing industry and, therefore, the return related to that risk should be significantly higher than prevailing interest rates. Generally, a fair ROI should exceed 20% on a new-asset venture, or 30% on net assets.

RETURN ON INVESTMENT DILEMMA

Because ROI is determined by multiplying "Income as a Percentage of Sales" by "Investment Turnover", it appears that we could increase our ROI by increasing one or the other factor, or both. This is true. But some background is necessary first. We will limit our statistics to the Profit Leaders.

Currently, the investment turnover for Profit Leaders is 125.11%. This means that these firms achieved $1.25 in sales for every $1.00 of assets employed. Let's look at the recent historical record of investment turnover.

1987	125.11%
1986	127.00
1985	129.87
1984	131.54
1983	131.84
1982	141.56
1981	142.49

Until 1982, investment turnover remained rather steady. Since then, however, there has been a downward trend in the investment turnover. The increasing capital cost of printing equipment accounts for this downward trend. By comparison, the income for Profit Leaders has remained fairly level during this period. Therefore, as the cost of equipment increases, the need for increased income becomes necessary to achieve and maintain a fair Return on Investment.

The following example explains how this would apply to your firm:

	Old	New
Equipment..............................	$ 50,000	$200,000
Investment Turnover....................	200%	140%
Desired Return on Investment...........	20%	20%

Return on Investment = Investment Turnover x Profit as a Percentage of Sales.

ROI	=	Income / Sales	x	Sales / Assets	Profit Needed As A Percentage of Sales
Old 20%	=	$\frac{\$10{,}000}{\$100{,}000}$	x	$\frac{\$100{,}000}{\$50{,}000}$	10%
New 20%	=	$\frac{\$40{,}000}{\$280{,}000}$	x	$\frac{\$280{,}000}{\$200{,}000}$	14.3%

To maintain the desired 20% ROI, you would need a profit of 14.3% on sales with the new equipment, compared to a 10% profit on sales with the old equipment.

There are two traps to avoid in ROI:

1. When you increase your working assets, such as equipment, you must also increase your profit as a percentage of sales to maintain a fair Return on Investment. If you don't, your ROI will suffer.

2. Your new selling price with a higher profit mark-up may be lower than your price using the old equipment. The new equipment should produce a lower unit selling price despite the higher cost rates and higher required profit margin, because the new equipment should be more efficient. If this is not true, there is no economic justification for replacing old, less expensive, (less capital intense) equipment with new, more expensive (more capital intense) equipment.

YOUR ULTIMATE GOAL: THINKING ROI

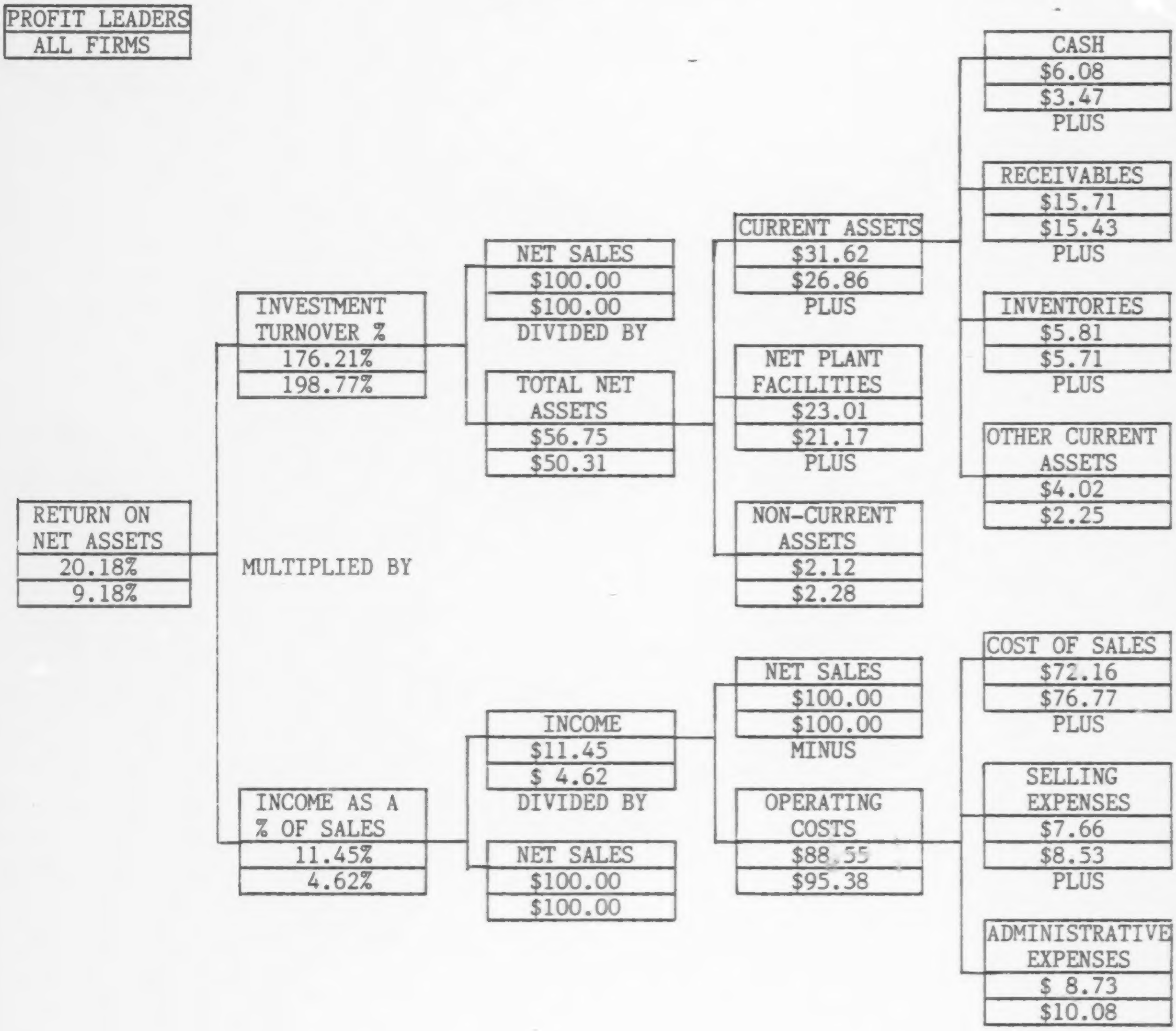
Thinking ROI is like working backwards. Thus, a knowledgeable printing manager might plan along these lines:

1.	Capital to be employed	$400,000
2.	Desired ROI: 20% of capital employed	80,000
3.	Sales to be achieved from new assets employed: 140%	560,000
4.	Required profit as a percentage of sales: $\frac{\$\,80{,}000}{\$560{,}000} = 14.3\%$	

This example shows that you must strive for a 14.3% profit on sales to produce a 20% ROI on the capital you employ.

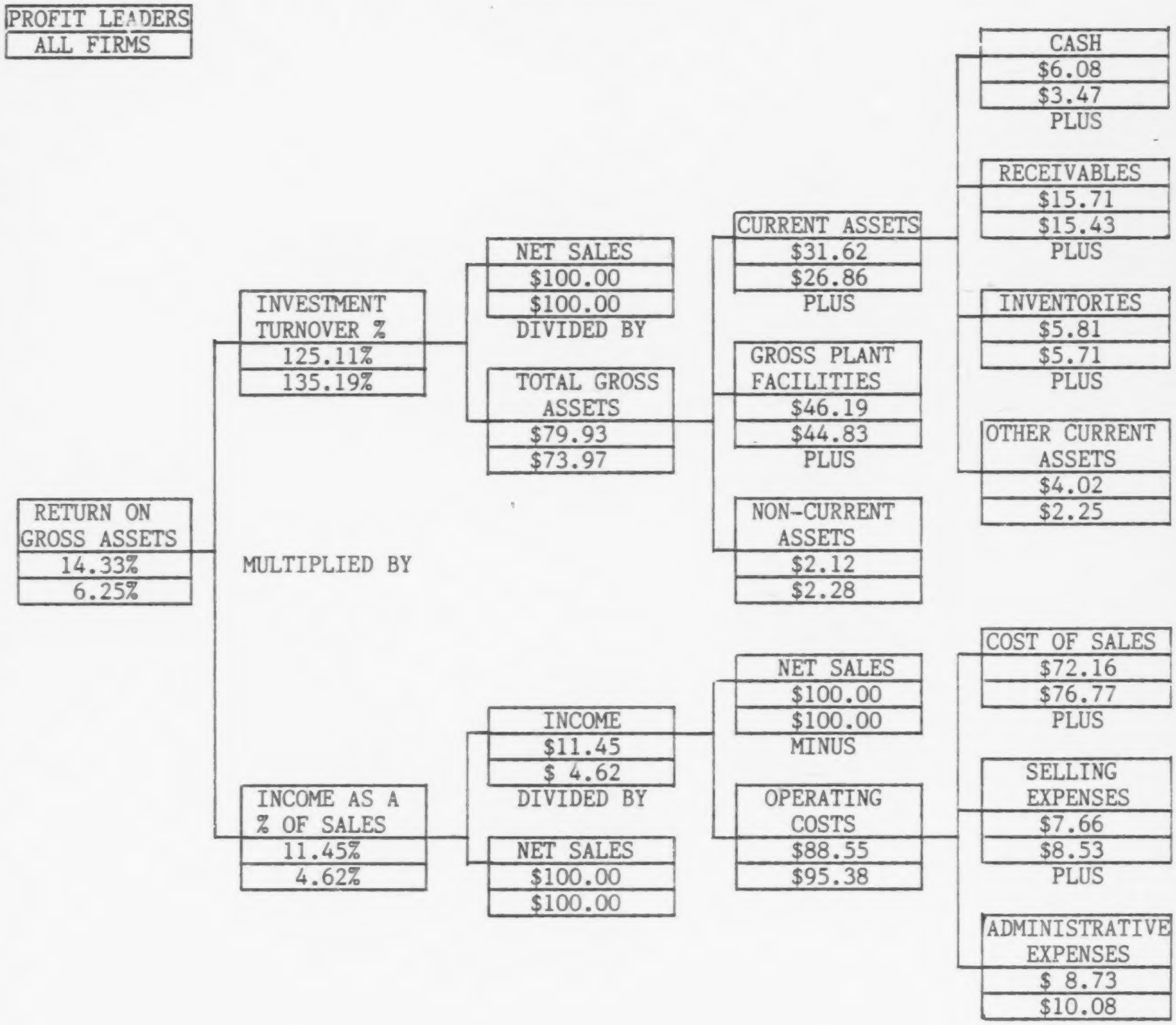
In conclusion, while profit as a percentage of sales must be maximized, make every effort to increase the investment turnover and thus derive a strong Return on Investment.

RETURN ON INVESTMENT CHART - BASE: $100 OF SALES
(NET ASSETS)


PROFIT LEADERS
ALL FIRMS
RETURN ON NET ASSETS
20.18%
9.18%
MULTIPLIED BY
INVESTMENT TURNOVER %
176.21%
198.77%
NET SALES
$100.00
$100.00
DIVIDED BY
TOTAL NET ASSETS
$56.75
$50.31
CURRENT ASSETS
$31.62
$26.86
PLUS
NET PLANT FACILITIES
$23.01
$21.17
PLUS
NON-CURRENT ASSETS
$2.12
$2.28
CASH
$6.08
$3.47
PLUS
RECEIVABLES
$15.71
$15.43
PLUS
INVENTORIES
$5.81
$5.71
PLUS
OTHER CURRENT ASSETS
$4.02
$2.25
INCOME AS A % OF SALES
11.45%
4.62%
INCOME
$11.45
$ 4.62
DIVIDED BY
NET SALES
$100.00
$100.00
NET SALES
$100.00
$100.00
MINUS
OPERATING COSTS
$88.55
$95.38
COST OF SALES
$72.16
$76.77
PLUS
SELLING EXPENSES
$7.66
$8.53
PLUS
ADMINISTRATIVE EXPENSES
$ 8.73
$10.08

RETURN ON INVESTMENT (ROI) CHART - ALL PRINTERS

RETURN ON INVESTMENT CHART - BASE: $100 OF SALES
(GROSS ASSETS)

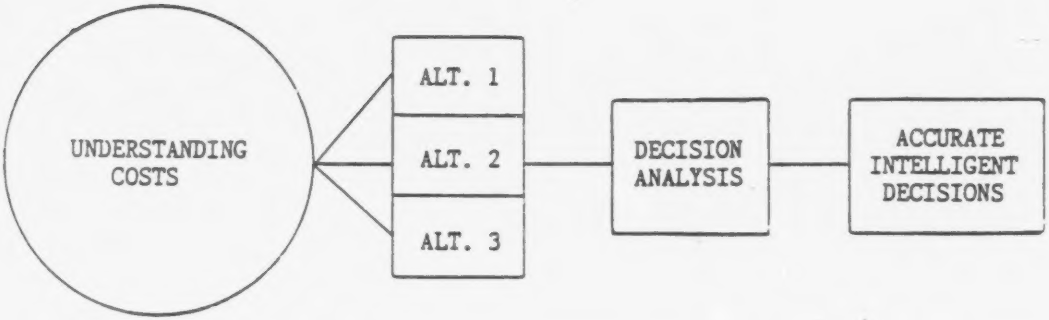

PROFIT LEADERS
ALL FIRMS
RETURN ON GROSS ASSETS
14.33%
6.25%
MULTIPLIED BY
INVESTMENT TURNOVER %
125.11%
135.19%
INCOME AS A % OF SALES
11.45%
4.62%
NET SALES
$100.00
$100.00
DIVIDED BY
TOTAL GROSS ASSETS
$79.93
$73.97
INCOME
$11.45
$ 4.62
DIVIDED BY
NET SALES
$100.00
$100.00
CURRENT ASSETS
$31.62
$26.86
PLUS
GROSS PLANT FACILITIES
$46.19
$44.83
PLUS
NON-CURRENT ASSETS
$2.12
$2.28
NET SALES
$100.00
$100.00
MINUS
OPERATING COSTS
$88.55
$95.38
CASH
$6.08
$3.47
PLUS
RECEIVABLES
$15.71
$15.43
PLUS
INVENTORIES
$5.81
$5.71
PLUS
OTHER CURRENT ASSETS
$4.02
$2.25
COST OF SALES
$72.16
$76.77
PLUS
SELLING EXPENSES
$7.66
$8.53
PLUS
ADMINISTRATIVE EXPENSES
$ 8.73
$10.08

A BREAK-EVEN ANGLE TO COST/VOLUME/PROFIT

Costing and pricing decisions can "make or break" a printing manufacturer. The printer is faced constantly with decisions about selling prices, fixed costs and variable costs. These decisions can be made intelligently if the printer fully understands and uses pricing techniques and cost-volume-profit relationships.

Of course, there are some factors a printer cannot control. Competition and market pressures will influence pricing decisions. Likewise, although costs do not determine the sales price, they do influence what that price will be. Understanding cost behavior enables the printer to make accurate predictions, thus ensuring good pricing and other financial management decisions. Using these concepts, a printer can more easily answer questions such as:

What printing techniques are most profitable?
Are we charging enough?
Should we concentrate on web sales?
Are we getting the most out of our press?
Could we expand? Should we expand?



COST KNOWLEDGE

Break-even analysis is the springboard to understanding cost behavior and the printer equipped with good cost knowledge will be able to manage and control expenses more efficiently. Throughout this discussion, keep in mind that printing is highly specialized and normally does not have "shelf items" to sell. Also, we must recognize that while break-even analysis may be of more benefit to some printers than to others, all printers will be able to utilize its basic concepts in making good financial decisions. A printer may use the analysis on a job-by-job basis to determine whether to accept or reject certain jobs, or may use it to project one-year operating results for the company. Similarly, the analysis may provide good answers to other key questions.

BREAK-EVEN POINT

The break-even point is the point at which sales and expenses are equal, that is, the point at which the profit is zero.

B/E POINT: SALES - EXPENSES = $0.00

A printer obviously wants to do better than break even. There would be no point to remaining in business if this was all he could look forward to. Break-even analysis encompasses much more than breaking even. It can determine what volume of printing must be generated and sold to reach a desired income level. It also can determine which jobs are profitable, and which are not.

Before we discuss the break-even point further, let's consider the two terms, "sales" and "costs." The term, "sales" needs no explanation; the more the better (assuming they are profit-yielding sales). Fortunately, printing sales volume has been on an upward trend and is expected to continue rising. On the other hand, costs are also rising. This is the area we must understand and manage effectively in order to stay ahead.

COSTS

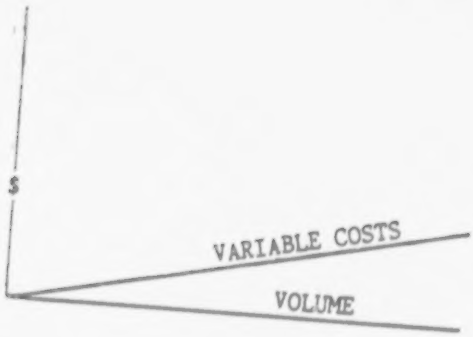
A printing manufacturer will have many costs. Some will vary in direct proportion to the volume of printing produced. Other costs will remain relatively fixed over a period of time. Some expenses contain both variable and fixed elements. It is important for the printer to identify and segregate these costs to understand how they influence profits.

Fixed Costs

Fixed costs are expenses that remain the same regardless of the level of output over a period of time. Rent, depreciation, supervisors' salaries and real estate taxes are just a few examples. Those fixed expenses listed in the PIA Ratio Study's section on Factory Expenses are identified and segregated. (See PIA Supporting Schedules in the Income Statements, page 37.)

Variable Costs

Paper, ink and direct wages are examples of a printer's variable costs. As the volume of printing increases, these costs will rise proportionately.



Mixed Costs

CAUTION. Recognize the fact that some expenses cannot be neatly placed in the fixed or variable category. There are expenses that may vary with production at a certain point in time, but not in direct proportion. For example, one printing supervisor may be able to oversee the work of the press department up to a certain volume of production. If sales volume increases appreciably, a second supervisor may have to oversee the additional volume of printing.

Conversely, if the volume of printing decreases, but only temporarily, there may be no need to reduce production staff. However, if the drop in volume is considered permanent, a supervisor may have to be laid off. Therefore, in the short run, supervisory salaries are considered fixed; in the long run, they may be variable.

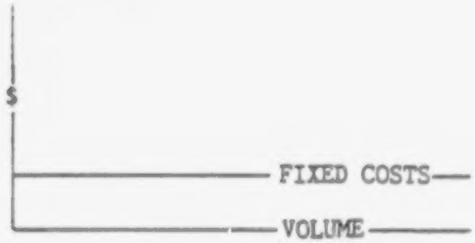
For this analysis, we will assume all costs can be classified clearly as fixed or variable. Normally, within a period of a year, one can accurately predict fixed and variable costs.

GRAPHING COSTS AND SALES

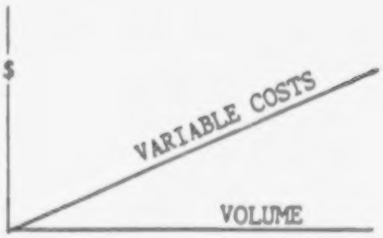
Combining fixed costs, variable costs and the sales line on a graph emphasizes the break-even point. Graph number 4 below shows that once the break-even point is reached in sales volume (fixed costs are covered), additional sales produce profits.

GRAPHING COSTS AND SALES (Continued)

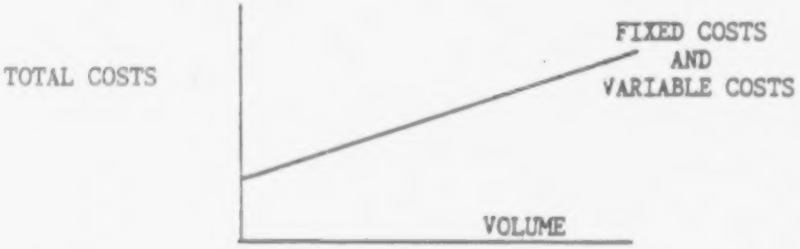
1. Fixed Costs



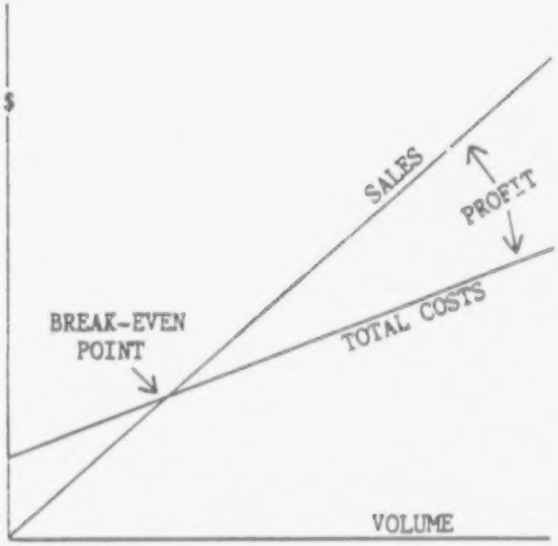
2. Variable Costs



3. Fixed and Variable Costs Combined



4. Break-even Graph



The graphs above assume that volume is the only factor influencing cost.

BREAK-EVEN ANALYSIS

How much printing must be sold to break even? What volume of printing must be sold to reach a target level of income? In printing, volume may be based on units (or thousands of units) of production, impressions per hour, dollar volume of sales, or other measures. For our simple illustration below, we will assume volume is based on thousands of units of production.

> Printer Smith would like to know what volume of printing he needs to break even. He has segregated his fixed and variable costs for the preceding year and has estimated what they will probably be in the current year. He has found that his total fixed cost will be approximately \$500,000. His average sales price is \$250 per thousand of units produced, and his variable costs are \$175 per thousand of units produced.

To find Smith's break-even point, he would use the break-even point equation and let X equal the number of thousand units needed to break even.

B/E Equation: UNIT SALES (in thousands) = VARIABLE COSTS + FIXED COSTS

$$\$250X = \$175X + \$500{,}000$$

$$X = 6{,}667 \text{ THOUSANDS OF UNITS}$$

So, Printer Smith would need to sell 6,667 thousands of units (or 6,667,000 units) of printing to break even.

> Next, Printer Smith would like to know what volume of printing he needs to match the average PIA Profit Leader's income level. (Historically, PIA Profit Leaders achieve an average of 12% income before taxes as a percentage of sales.)

The equation he will now use is:

UNIT SALES (in thousands) = VARIABLE COSTS + FIXED COSTS + DESIRED INCOME

$$\$250X = \$175X + \$500{,}000 + .12(\$250X)$$

$$X = 11{,}111 \text{ THOUSANDS OF UNITS}$$

Therefore, if he sold 11,111,000 units, he should expect his income before income taxes to be 12%.

Keep in mind that Printer Smith's break-even analysis was based on a particular set of assumptions. If his conditions change, a whole new set of cost-volume-profit relationships would appear.

OTHER APPLICATIONS OF BREAK-EVEN ANALYSIS

Break-even analysis also can provide other helpful information, particularly in budgeting and forecasting. Printer Smith is considering a new plant layout and expansion. If he follows through with this plan, his fixed and variable costs may change considerably. To find out how much, he could plot his various levels of expected production together with expected changes in his fixed and variable costs, and then analyze results at various levels of production.

He also can use the break-even approach on a job-by-job basis. Some jobs are accepted for reasons other than profit. These reasons might include filling in slack press time with a no-profit or low-profit job (bringing in cash for fixed expenses). Yet, to predict exactly how much income a particular job is adding to profits, the break-even analysis is very enlightening.

THE INVENTORY DECISION - LIFO VS. FIFO

Printers struggle to dam the tide of red ink and to produce a profit. Lately, another hidden menace has been gnawing away at after-tax income: the higher replacement costs of materials and supplies.

A printer claims a 12% profit on a $1,000 sale if expenses, including materials, supplies, factory payroll and overhead, interest, administrative and selling expenses, total $880. But is this really true? Does he really have a 12% or $120 profit?

In manufacturing his product, he used a substantial dollar volume of materials and supplies -- paper, ink, photographic materials, plates, etc. -- and now he must replace them. In the meantime, the purchase price of those supplies and materials has increased. (Who can cite a case where the cost of materials and supplies have decreased?) Where does the additional money come from? The answer is easy: the difference in replacement costs must be taken from the $120 profit.

There is not much a printer can do about rising replacement costs, but proper accounting methods for the inventory of materials and supplies can save substantial tax dollars. These lowered taxes translate into money that can be used to soften the blow of higher replacement costs. And the more those replacement costs increase, the more tax dollars are saved.

The two most common inventory methods in use today are FIFO (First In, First Out) and LIFO (Last In, First Out). Both methods are accounting tools to describe the flow of materials and supplies for financial statement and tax purposes only. Neither has an effect on the actual replacement of materials and supplies.

The majority of printers use the FIFO method of inventory valuation. This provides them with higher end of the year after-tax profits on their books than does the LIFO method. Unfortunately, this is a "fool's profit." LIFO, on the other hand, shows lower profits on the books, and consequently, results in lower taxes.

The FIFO approach assumes that a printer first uses materials and supplies that were purchased a long ago when prices were lower. More recently purchased goods (bought at higher prices) are assumed to be used last, after the older, less costly materials are consumed. The newer materials and supplies are inventoried at a higher price. Since material and supply costs as well as the other costs of operating a business are deducted from sales costs, to determine pre-tax profits, these lower expenses will bounce profits to an unrealistic higher level.

The higher profit figures may seem appealing at first glance. They certainly will appeal to shareholders. But corporate taxes are based on the amount of a company's profits. What happens is that a printer using FIFO is reporting profits to the IRS that are too high, much the same way as if he had understated his selling and administrative expenses.

Valuing inventory with the LIFO method means that, in theory, a printer first places his most recently purchased materials and supplies into production. Again, during inflationary times, the most recent purchases represent higher dollar amounts than do earlier purchases. Although the rate of inflation has declined in recent years, costs of materials and supplies are still increasing, not shrinking.

These high-valued cost factors result in a more realistic, lower profit. In turn, a lower profit results in lower taxes, and the printer is left with more money available to help offset his rising costs.

As a practical matter, FIFO and LIFO only represent the hypothetical flow of goods through your plant. While reported profits will vary, depending on the use of FIFO or LIFO, in both methods exactly the same amount of cash flows in and out. The amount of tax levied is the only difference. FIFO users will pay higher taxes than their LIFO counterparts.

Furthermore, as costs climb, the difference between FIFO and LIFO users' tax payments increases correspondingly. The increased value of inventories remains untaxed for LIFO users. The FIFO taxpayer does not have this advantage.

The example shown on page 73 demonstrates exactly how significant the tax savings can be for a printing firm opting for LIFO over FIFO. In both cases, all reported income and expenses are exactly the same -- with the notable exception of materials and federal income taxes.

Using FIFO, the printing firm with $1,000,000 in sales values its inventory on a first-bought, first-used basis. This means that the company is reporting that the materials it places into production were purchased back when prices were lower than they are today. The $350,000 figure entered for materials will not buy the same volume of materials in the current market.

Converting to LIFO inventory, the same company saves $9,200, the equivalent of doing $92,000 more business that year at 10% profit before taxes. The printing firm reports that the materials required to produce its $1,000,000 in sales were valued at the current (most recently purchased) market price and not necessarily at the actual price paid for them. The LIFO method shows that $370,000 worth of materials were used, some $20,000 more than the same company reported using FIFO.

The additional $20,000 in materials cost decreases income before taxes by $20,000. The example shows that the LIFO system leads to lower reported income and lower taxes; in this instance, $9,200.

Assuming that the printer is going to replace all of his used materials, his actual costs will come much closer to the $370,000 figure shown in the LIFO approach than to the $350,000 in the FIFO entry.

Using FIFO, the company will have to take $20,000 from its after-tax profit and add it to its reported $350,000 materials cost to replace the used materials. This will reduce its after-tax profit from $85,050 to $65,050, or $9,200 less than the $74,250 after-tax profit produced by the LIFO method.

This $9,200 is not merely an "on paper" saving. It is hard cash in the bank, achieved by lower tax payments. If material costs (most recently purchased) had increased more than the $20,000 indicated in our example, it is not hard to see how an even greater tax saving would have occurred. Graphic Arts firms are foolish to continue reporting high profits realized under the FIFO method. They should convert immediately to the more favorable pre-tax profits enjoyed by LIFO users.

Because LIFO generally represents a change in inventory planning for graphic arts managers, questions about the method are expected. The following are typical questions and our answers:

Q. How does a printing firm switch from FIFO to LIFO?

A. All you have to do is file IRS Form 970 with the Internal Revenue Service explaining exactly what your inventory method entails. You don't have to receive permission; you just sit back and collect the tax benefits.

Q. Wouldn't you be less likely to receive a bank loan using LIFO instead of FIFO? After all, your profits are lower!

A. Bankers are not fools. They know the difference LIFO and FIFO makes in reported profits. They can easily adjust, either up or down, the reported profit figures from both methods. In fact, a serious banker might well question the business smarts of a printer who unnecessarily "gives" additional tax dollars to the IRS by using FIFO.

Q. How far back can you go when valuing inventory under LIFO? 2 years? 10 years? 50 years?

A. In the year that your conversion takes place, you use the previous year's ending inventory as your beginning or base. Any increases in inventory would come in beginning of the year purchases. Then, at the end of the next year you go back to that base, which is now two years old, as your starting point. If both you and your business last another 50 years, you would still go back to the inventory base established when you first converted the approach from FIFO to LIFO.

Q. Do we have to keep our inventory records at these LIFO values? What good are my paper and work-in-process inventories at prices that I paid in 1975?

A. If you keep your cost sheet at current hourly rates and your perpetual paper inventory at current prices, you can turn over your FIFO inventory to your accountant for conversion to LIFO.

Q. If we are going to sell our business, wouldn't we lose money by not using the FIFO method? Under LIFO our profit is lower and the inventory on the balance sheet is lower.

A. First of all, you should operate your business as efficiently as possible, not merely to report "fool's profits." But, if you did want to sell, you explain to your buyer how your inventory method works. Then, you sell your inventory at the current replacement cost and not at your LIFO value.

Q. Can I price all inventories by the LIFO method, including work-in-process, paper and other chargeable materials (ink, film and plates), and other non-chargeable supplies?

A. Yes. You are talking about big dollars and in a growing firm this amount keeps increasing. The LIFO inventory reserve gets bigger and the tax saving accumulation becomes more substantial.

LIFO VS. FIFO: COMPARISON OF PROFIT AND TAXES

	FIFO METHOD	LIFO METHOD
SALES	$1,000,000	$1,000,000
FACTORY COST OF PRODUCT		
MATERIAL*	350,000	370,000
FACTORY PAYROLL	260,000	260,000
FACTORY EXPENSES	106,000	106,000
	716,000	736,000
GROSS PROFIT	284,000	264,000
ADMINISTRATIVE AND SELLING EXPENSES	160,000	160,000
	124,000	104,000
INTEREST	10,000	10,000
	114,000	94,000
OTHER INCOME	6,000	6,000
INCOME BEFORE TAXES	120,000	100,000
FEDERAL INCOME TAXES	34,950	25,750
AFTER TAX PROFIT	$ 85,050	$ 74,250

---

*COST OF MATERIAL USED		
INVENTORY - JANUARY 1	$ 150,000	$ 150,000
PURCHASES	360,000	360,000
	510,000	510,000
	(320,000 lbs. @ $.50)	(320,000 lbs. @ $.4375)
INVENTORY - DECEMBER 31	160,000	140,000
COST OF MATERIAL USED	$ 350,000	$ 370,000

Using the FIFO method, this printing firm valued its cost of paper at the most recent purchase price, $.50 per pound. Under LIFO, the same firm valued its paper at the earliest purchase price, $.4375 per pound. The FIFO system generates a "fool's profit" of $10,800 over the LIFO approach, while the LIFO system saves $9,200 in taxes.

STRATEGIES FOR BETTER COSTING AND PRICING

Economic conditions in recent years have forced business managers to seize tighter control of their costing and pricing strategies. Even though industrial trends showed that large printers have been relatively unaffected by recessionary pressures, the majority of medium to small printing firms were not as fortunate. These firms were ravaged by both inflationary and recessionary elements.

We are now told that the economy is, once again, mending nicely. Even if this is true, improvement is spotty with certain areas and printing markets experiencing great difficulties. In any case, the time is right for printing managers to employ updated costing and pricing strategies.

REPLACEMENT COSTS

The average printer is spending approximately 37% of sales on materials. Printers cannot use yesterday's costs to determine today's pricing. While this simple statement may sound obvious, the fact remains that the majority of printers do calculate prices based on outdated costs.

With costs continually changing, printers must be ready to update their costing and pricing systems. Furthermore, to price jobs profitably they must be able to anticipate what cost increases will be. That is the problem. Determining exact figures for these costing components is difficult.

The NIFO (Next-In, First-Out) method for materials costing ensures that a printing firm's costs for a job will be reported to allow for adequate funds to replace the goods used to produce the work.

Using the NIFO method, if you were to cost a job that required paper purchased at 46 cents per pound, film at $3.00 per sheet, and plates at $7.25, you would look ahead to what the replacement cost of these materials will be before you cost and price the work. If today's prices indicate that paper has jumped to 52 cents, film to $4.00, and plates to $8.60, these are the figures you would use to calculate both your costs and your final price.

Pricing and Costing Using Replacement Values

	Original Purchase Price	Current Price to Replace
Paper	$0.46/1b.	$0.52/1b.
Film	$3.00	$4.00
Plates	$7.25	$8.60

According to NIFO, you cost and price at:

Paper	Film	Plates
$0.52/1b	$4.00	$8.60

Keep in mind that the purpose of your cost and accounting system is to give you a clear picture of the ongoing financial operations of your business. The more accurate this picture is, the more intelligently you can price your printed product. Any system that does not provide for the replacement of materials and supplies will dig directly into your profit on that job.

UPDATED HOURLY COST RATES

Hourly cost rates are another factor with tremendous impact on costing and pricing. Production cost calculations must be re-examined at increasingly close intervals as the cost of doing business climbs.

Since the basis for accurate budgeted hourly rates is an analysis of current operating expenses and anticipating increased expenses, these rates must be reviewed continually to make sure they are profitable, competitive and are producing an acceptable income and return on investment.

INCREASED PRODUCTIVITY

Although the pace of increasing costs has slowed, printers must still find a way to maintain a competitive edge. They should take a close look at their levels of productivity. Improved productivity will lower the cost per unit and thus permit pricing to remain at competitive levels. Innovations are available in both management and technology that can give a big boost to productivity. Printers who do not keep pace with these innovations may well find that higher costs are driving them out of competition; sending their customers to a printer who can offer better prices.

If your cost per hour of production is, for example, $40.00 and you produce 5,000 units per hour, your costs are $8.00 for each 1,000 units. With advances in technology, it may be possible to lower the cost per unit and gain a competitive edge in the market. A $1 per thousand decrease in costs may make the difference between gaining or losing a big sale.

Units produced can be improved. It is a rare printer who can honestly say he cannot increase units produced per hour. For example, are your presses turning at full rated speed? A boost of 714 units produced per hour would lower the cost per unit to $7 per thousand. Even though this 14% increase might not be fully achieved, it is remarkable just how much productivity can be improved if you set your goal and keep to it.

Increased Productivity Keeps Cost Per Unit Down

	Cost Per Hour ($)	Units Produced (Per Hour)	Cost Per Unit ($ per M)
Base	$40.00	5,000	$8.00
714 Units Per Hour Increase	40.00	5,714	7.00

It may be necessary to buy new equipment to implement this increase in units produced per hour. Or, a production improvement program or merely an investment in higher quality materials may be sufficient. Often an increase in productivity can be effected without any added capital.

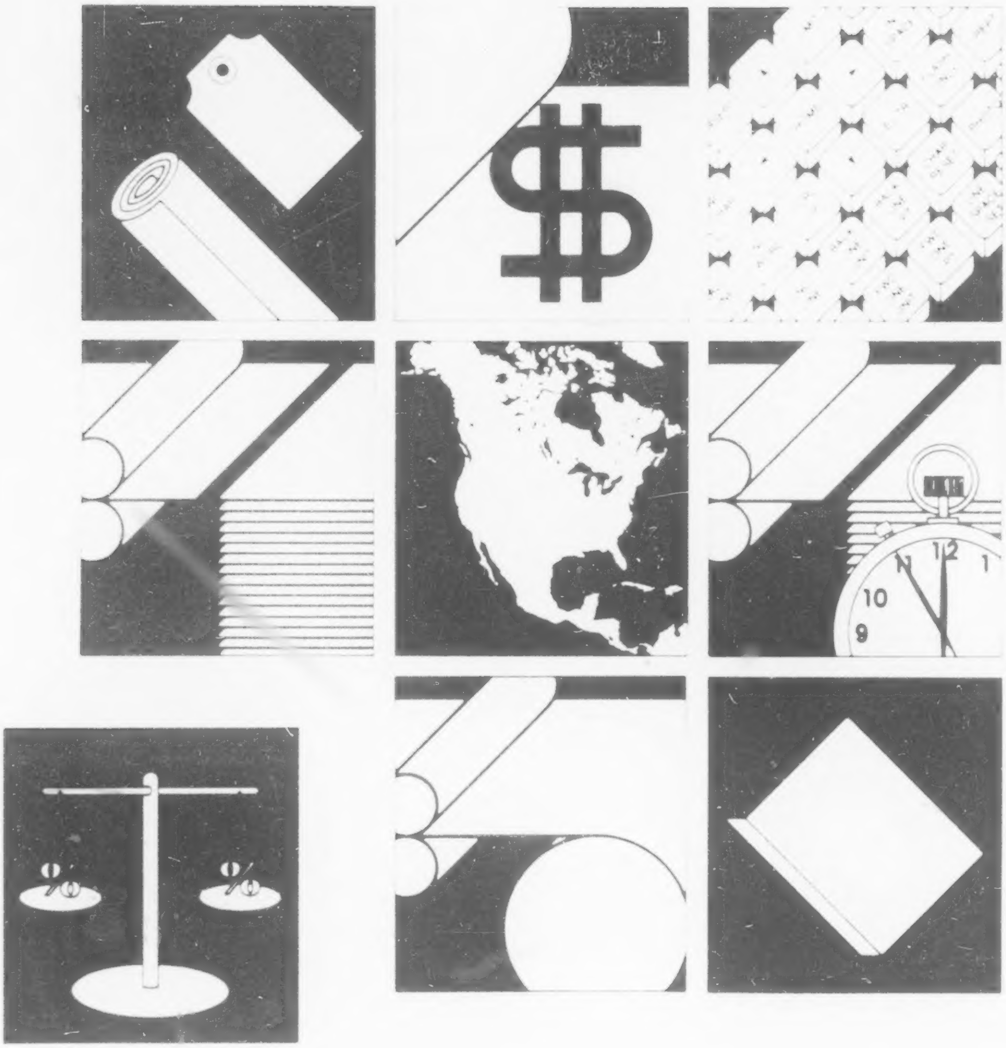
The profitable practices of today may be loss operations tomorrow. Printers must be ready to investigate all and any avenues that might lead to increased productivity. By doing so, they will be better prepared to maintain their customer base and possibly gain a larger share of the market. Tight controls must be maintained in all aspects of the business to help keep costs in line. Accounting systems must insure that all costs are reported, and that costs and prices are geared to ensure continuing a healthy operation. If these practices are followed enthusiastically, printing firms should be able to effectively compete and achieve higher levels of profitability.

A8740-1.2 U

10/87

PIA
1887–1987

1987 Financial Ratio Study



Volume II

All Printers By Sales Volume

1987
FINANCIAL
RATIO STUDY

Volume II: All Printers By Sales Volume

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

Dear Colleague:

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 826 printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume for example, sales to $250,000, $250,000 to $500,000, $500,000 to $1,500,000, etc. Readers can compare their firm's operations with other firms having the same sales volume in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

Table of Contents

Page Number

FOREWORD 2

VALUE ADDED—WHAT IT MEANS TO YOU 4–5

ALL PRINTERS BY SALES VOLUME 6–19
- All Firms Reporting
- 0 to $250,000
- $250,000 to $500,000
- $500,000 to $1,500,000
- $1,500,000 to $5,000,000
- $5,000,000 to $10,000,000
- Over $10,000,000

Report on Operations - Value Added = 100% 6–7
Supporting Schedules - Value Added = 100% 8–9
Report on Operations - Sales = 100% 10–11
Supporting Schedules - Sales = 100% 10–13
Balance Sheet 14–15
Significant Facts 16–17
Return on Investment - Per $100 of Sales 18–19

ABSOLUTE DATA 20

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales Firm's Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%
B	500,000	100,000	20.0
C	8,000,000	975,000	12.2

62.2% divided by 3 = 20.7%
= PIA Factory
Payroll Ratio

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	41.84	37.20	36.19	31.34	38.38	33.63
FACTORY EXPENSES	21.28	19.42	29.45	31.17	26.33	29.76
TOTAL FACTORY COST OF PRODUCT	63.12	56.62	65.64	62.51	64.71	63.39
GROSS PROFIT	36.88	43.38	34.36	37.49	35.29	36.61
ADMINISTRATIVE AND SELLING EXPENSES						
Administrative expenses	15.91	13.50	15.99	11.08	22.52	16.12
Selling expenses	13.56	11.91	7.35	5.71	8.62	6.73
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	29.47	25.41	23.34	16.79	31.14	22.85
INCOME BEFORE INTEREST EXPENSE	7.41	17.97	11.02	20.70	4.15	13.76
Interest expense	3.13	2.04	2.56	1.61	2.27	1.23
OPERATING INCOME	4.28	15.93	8.46	19.09	1.88	12.53
Other income (expense)	1.17	2.13	0.61	(0.03)	0.98	0.56
INCOME BEFORE INCOME TAXES	5.45	18.06	9.07	19.06	2.86	13.09

---

* See page 10 for the definition of "Profit Leaders."

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
40.43	37.00	41.26	35.72	42.48	37.17	44.93	39.91
22.33	19.48	20.28	18.75	20.70	18.55	21.05	18.76
62.76	56.48	61.54	54.47	63.18	55.72	65.98	58.67
37.24	43.52	38.46	45.53	36.82	44.28	34.02	41.33
20.10	16.50	16.59	15.26	13.73	12.60	10.82	10.65
11.89	10.48	15.03	12.53	14.48	13.60	13.06	11.65
31.99	26.98	31.62	27.79	28.21	26.20	23.88	22.30
5.25	16.54	6.84	17.74	8.61	18.08	10.14	19.03
2.77	2.14	3.33	2.44	3.22	1.73	3.30	1.93
2.48	14.40	3.51	15.30	5.39	16.35	6.84	17.10
1.13	3.42	1.32	2.78	1.15	1.65	1.04	1.43
3.61	17.82	4.83	18.08	6.54	18.00	7.88	18.53

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL						
Salaries - executive	3.03%	2.63%	2.16%	0.00%	2.41%	4.22%
Direct wages	28.37	24.87	26.31	24.59	28.75	25.63
General factory salaries and wages	2.87	2.82	0.90	0.08	2.03	0.51
Packing, shipping and delivery wages	1.32	1.20	0.33	0.75	0.25	0.21
Payroll taxes	2.83	2.33	4.53	4.99	3.20	2.39
Employee benefits	3.42	3.35	1.96	0.93	1.74	0.67
TOTAL FACTORY PAYROLL	41.84	37.20	36.19	31.34	38.38	33.63
FACTORY EXPENSES						
Fixed Expenses						
Depreciation - real estate	0.35	0.35	0.00	0.00	0.25	0.00
Depreciation - other	5.80	5.73	9.51	10.77	6.16	5.36
Taxes - real estate	0.33	0.35	0.33	0.73	0.18	0.00
Taxes - other	0.31	0.27	0.22	0.37	0.27	0.19
Insurance	1.03	0.80	2.00	1.99	2.03	2.16
Building rent	2.47	1.92	7.14	5.90	5.65	5.20
Utilities - heat, light, etc.	1.88	1.65	2.55	3.34	1.95	2.20
Equipment rental	1.13	0.67	0.69	1.33	1.87	4.11
Total Fixed Expenses	13.30	11.74	22.44	24.43	18.36	19.22
Other Expenses						
Factory supplies and expense	3.01	2.77	1.64	1.81	3.00	5.60
Packing, shipping and delivery expense	1.66	1.61	1.00	1.69	2.16	1.72
Repairs and maintenance	2.31	2.20	3.09	3.24	2.38	2.51
Other factory expenses	1.00	1.10	1.28	0.00	0.43	0.71
Total Other Expenses	7.98	7.68	7.01	6.74	7.97	10.54
TOTAL FACTORY EXPENSES	21.28	19.42	29.45	31.17	26.33	29.76
ADMINISTRATIVE EXPENSES						
Salaries - executive	4.72	4.51	5.58	2.88	8.92	5.34
Salaries - office	3.91	2.90	3.25	1.91	5.25	2.52
Payroll taxes	0.61	0.42	0.70	0.42	1.08	0.60
Employee benefits	0.88	0.71	0.20	0.00	0.98	0.36
Bad debts	0.71	0.61	0.20	0.10	0.41	1.95
Office supplies and expenses	0.75	0.66	0.80	1.04	0.96	1.10
Professional fees	0.97	0.84	1.39	1.52	1.05	1.40
Taxes - business	0.25	0.25	0.11	0.08	0.67	0.28
Telephone	0.73	0.54	1.07	1.11	1.08	0.86
Other administrative expenses	2.38	2.06	2.69	2.02	2.12	1.71
TOTAL ADMINISTRATIVE EXPENSES	15.91	13.50	15.99	11.08	22.52	16.12
SELLING EXPENSES						
Salaries - executive	1.86	1.52	0.78	0.00	1.91	2.90
Salaries and commissions - salesmen	6.37	5.87	2.05	2.12	3.31	0.00
Salaries - sales office clerical	1.14	0.89	0.00	0.00	0.29	0.00
Payroll taxes	0.54	0.40	0.41	0.57	0.34	0.23
Employee benefits	0.55	0.52	0.12	0.10	0.22	0.42
Advertising	0.68	0.55	0.94	1.72	1.14	1.24
Travel and entertainment	1.22	1.12	0.92	0.26	1.09	1.19
Other selling expenses	1.20	1.04	2.13	0.94	0.32	0.75
TOTAL SELLING EXPENSES	13.56	11.91	7.35	5.71	8.62	6.73

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
3.11%	2.18%	3.14%	2.49%	2.98%	2.91%	2.97%	2.96%
28.77	26.69	28.46	25.07	28.02	24.76	28.17	23.65
2.22	3.12	2.26	1.68	3.29	2.43	4.64	4.70
1.02	0.93	1.45	1.11	1.39	1.33	1.60	1.49
2.76	1.93	2.83	2.30	2.80	2.29	2.74	2.34
2.55	2.15	3.12	3.07	4.00	3.45	4.81	4.77
40.43	37.00	41.26	35.72	42.48	37.17	44.93	39.91
0.31	0.35	0.36	0.35	0.33	0.34	0.47	0.44
6.17	6.72	5.76	5.70	5.67	5.44	5.38	4.84
0.30	0.41	0.32	0.35	0.33	0.34	0.39	0.31
0.32	0.35	0.30	0.28	0.33	0.19	0.30	0.28
1.53	1.39	0.99	0.69	0.79	0.70	0.53	0.42
3.56	2.44	2.30	2.20	1.88	1.61	1.20	0.90
1.70	1.27	1.66	1.25	1.96	1.67	2.35	2.07
1.80	1.06	0.96	0.79	0.93	0.20	0.80	0.40
15.69	13.99	12.65	11.61	12.22	10.49	11.42	9.66
2.26	1.58	2.85	2.41	3.27	2.88	3.94	3.64
1.41	1.63	1.68	1.38	1.73	1.68	1.74	1.76
2.32	1.98	2.10	2.36	2.39	2.39	2.54	1.85
0.65	0.30	1.00	0.99	1.09	1.11	1.41	1.85
6.64	5.49	7.63	7.14	8.48	8.06	9.63	9.10
22.33	19.48	20.28	18.75	20.70	18.55	21.05	18.76
6.57	6.97	4.84	4.97	3.87	4.39	2.36	2.77
5.28	3.72	4.15	3.43	3.01	2.38	2.66	2.43
0.86	0.46	0.65	0.51	0.44	0.39	0.32	0.30
1.01	0.55	0.85	0.72	0.95	0.69	0.74	0.93
0.61	0.54	0.80	0.64	0.81	0.65	0.63	0.53
0.93	1.04	0.83	0.73	0.58	0.52	0.50	0.38
1.02	0.97	1.05	0.81	0.92	0.83	0.77	0.70
0.34	0.30	0.28	0.31	0.13	0.26	0.14	0.17
0.94	0.64	0.71	0.52	0.68	0.57	0.50	0.39
2.54	1.31	2.43	2.62	2.34	1.92	2.20	2.05
20.10	16.50	16.59	15.26	13.73	12.60	10.82	10.65
2.04	1.69	2.05	1.42	1.84	1.92	1.34	1.22
5.06	4.21	7.31	6.90	7.09	7.28	6.25	5.37
0.84	0.52	1.17	0.60	1.32	1.14	1.47	1.37
0.52	0.26	0.62	0.45	0.53	0.43	0.46	0.39
0.41	0.27	0.59	0.56	0.66	0.73	0.59	0.50
0.76	0.81	0.71	0.52	0.64	0.42	0.47	0.35
1.23	1.48	1.32	1.29	1.19	0.98	1.08	0.91
1.03	1.24	1.26	0.79	1.21	0.70	1.40	1.54
11.89	10.48	15.03	12.53	14.48	13.60	13.06	11.65

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT						
MATERIALS						
Paper	23.46	22.63	19.40	20.75	19.57	19.11
Other chargeable materials	5.12	4.77	7.25	3.35	3.62	2.71
Outside services	8.67	8.28	7.86	8.90	8.22	10.08
TOTAL MATERIALS	37.25	35.68	34.51	33.00	31.41	31.90
FACTORY PAYROLL	26.20	23.98	23.84	21.14	26.40	22.93
FACTORY EXPENSES	13.32	12.50	19.56	21.30	18.08	20.18
TOTAL FACTORY COST OF PRODUCT	76.77	72.16	77.91	75.44	75.89	75.01
GROSS PROFIT	23.23	27.84	22.09	24.56	24.11	24.99
ADMINISTRATIVE AND SELLING EXPENSES						
Administrative expenses	10.08	8.73	10.15	7.32	15.51	11.07
Selling expenses	8.53	7.66	4.71	3.68	5.86	4.55
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	18.61	16.39	14.86	11.00	21.37	15.62
INCOME BEFORE INTEREST EXPENSE	4.62	11.45	7.23	13.56	2.74	9.37
Interest expense	1.94	1.29	1.67	1.01	1.55	0.85
OPERATING INCOME	2.68	10.16	5.56	12.55	1.19	8.52
Other income (expense)	0.74	1.33	0.38	(0.02)	0.71	0.38
INCOME BEFORE INCOME TAXES	3.42	11.49	5.94	12.53	1.90	8.90

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS						
Ink	1.62%	1.40%	0.45%	0.70%	0.80%	0.79%
Film	1.08	1.02	0.58	1.00	0.90	0.81
Plates	1.09	1.03	0.61	0.94	1.08	1.10
Other chargeable materials	1.33	1.32	5.61	0.71	0.84	0.01
TOTAL OTHER CHARGEABLE MATERIALS	5.12	4.77	7.25	3.35	3.62	2.71
OUTSIDE SERVICES						
Composition	0.80	1.27	1.43	2.59	1.39	1.41
Offset preparation	1.28	1.20	0.31	0.51	0.35	0.00
Printing	2.22	2.12	4.22	4.63	3.27	2.78
Binding	2.23	1.75	1.15	1.17	1.20	2.68
Other outside services	2.14	1.94	0.75	0.00	2.01	3.21
TOTAL OUTSIDE SERVICES	8.67	8.28	7.86	8.90	8.22	10.08

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
20.72	19.38	21.92	22.07	25.07	23.97	28.84	24.46
4.60	5.03	4.93	4.19	5.31	4.52	6.06	5.81
9.10	10.21	9.39	8.50	8.25	8.16	7.40	6.78
34.42	34.62	36.24	34.76	38.63	36.65	42.30	37.05
26.46	24.43	26.36	23.26	26.08	23.64	25.82	25.15
14.59	12.72	12.93	12.18	12.64	11.83	11.98	11.74
75.47	71.77	75.53	70.20	77.35	72.12	80.10	73.94
24.53	28.23	24.47	29.80	22.65	27.88	19.90	26.06
13.19	10.86	10.59	10.07	8.40	7.97	6.27	6.65
7.79	6.65	9.59	8.23	8.93	8.58	7.68	7.51
20.98	17.51	20.18	18.30	17.33	16.55	13.95	14.16
3.55	10.72	4.29	11.50	5.32	11.33	5.95	11.90
1.81	1.36	2.12	1.58	1.94	1.06	1.85	1.22
1.74	9.36	2.17	9.92	3.38	10.27	4.10	10.68
0.75	2.18	0.86	1.72	0.68	1.05	0.58	0.85
2.49	11.54	3.03	11.64	4.06	11.32	4.68	11.53

0.97%	0.95%	1.36%	1.12%	1.73%	1.27%	2.83%	2.16%
1.08	1.34	1.18	0.99	1.12	0.80	0.94	1.10
1.06	1.31	1.19	0.96	1.17	1.00	0.94	1.00
1.49	1.43	1.20	1.12	1.29	1.45	1.35	1.55
4.60	5.03	4.93	4.19	5.31	4.52	6.06	5.81
0.91	1.57	1.01	1.43	0.58	1.18	0.41	0.80
0.94	1.72	1.67	1.66	1.37	0.93	1.01	0.76
3.42	2.90	2.11	2.17	1.52	2.41	1.63	0.85
1.55	1.72	2.40	1.03	2.66	2.27	2.36	2.15
2.28	2.30	2.20	2.21	2.12	1.37	1.99	2.22
9.10	10.21	9.39	8.50	8.25	8.16	7.40	6.78

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL						
Salaries - executive	1.91%	1.70%	1.45%	0.00%	1.58%	2.88%
Direct wages	17.80	16.11	17.32	16.74	19.86	17.44
General factory salaries and wages	1.78	1.78	0.61	0.05	1.34	0.36
Packing, shipping and delivery wages	0.81	0.76	0.20	0.46	0.17	0.15
Payroll taxes	1.78	1.50	2.97	3.32	2.24	1.63
Employee benefits	2.12	2.13	1.29	0.57	1.21	0.47
TOTAL FACTORY PAYROLL	26.20	23.98	23.84	21.14	26.40	22.93
FACTORY EXPENSES						
Fixed Expenses						
Depreciation - real estate	0.22	0.23	0.00	0.00	0.17	0.00
Depreciation - other	3.63	3.65	6.31	7.47	4.29	3.64
Taxes - real estate	0.20	0.23	0.20	0.46	0.12	0.00
Taxes - other	0.19	0.18	0.16	0.28	0.19	0.13
Insurance	0.66	0.53	1.31	1.35	1.37	1.46
Building rent	1.58	1.25	4.68	3.89	3.87	3.57
Utilities - heat, light, etc.	1.16	1.05	1.75	2.35	1.33	1.49
Equipment rental	0.72	0.45	0.54	1.07	1.29	2.84
Total Fixed Expenses	8.36	7.57	14.95	16.87	12.63	13.13
Other Expenses						
Factory supplies and expense	1.88	1.79	1.10	1.17	2.07	3.73
Packing, shipping and delivery expense	1.02	1.00	0.63	1.05	1.47	1.15
Repairs and maintenance	1.43	1.41	2.06	2.21	1.61	1.68
Other factory expenses	0.63	0.73	0.82	0.00	0.30	0.49
Total Other Expenses	4.96	4.93	4.61	4.43	5.45	7.05
TOTAL FACTORY EXPENSES	13.32	12.50	19.56	21.30	18.08	20.18
ADMINISTRATIVE EXPENSES						
Salaries - executive	3.01	2.93	3.34	1.77	6.22	3.68
Salaries - office	2.48	1.86	2.07	1.18	3.58	1.72
Payroll taxes	0.39	0.27	0.43	0.26	0.75	0.41
Employee benefits	0.56	0.45	0.11	0.00	0.68	0.25
Bad debts	0.44	0.39	0.14	0.07	0.28	1.32
Office supplies and expenses	0.47	0.43	0.53	0.71	0.67	0.74
Professional fees	0.61	0.55	0.91	0.99	0.72	0.97
Taxes - business	0.16	0.16	0.07	0.05	0.40	0.19
Telephone	0.46	0.35	0.69	0.69	0.75	0.60
Other administrative expenses	1.50	1.34	1.86	1.60	1.46	1.19
TOTAL ADMINISTRATIVE EXPENSES	10.08	8.73	10.15	7.32	15.51	11.07
SELLING EXPENSES						
Salaries - executive	1.17	0.98	0.56	0.00	1.28	1.97
Salaries and commissions - salesmen	4.01	3.73	1.35	1.37	2.25	0.00
Salaries - sales office clerical	0.72	0.59	0.00	0.00	0.20	0.00
Payroll taxes	0.34	0.26	0.28	0.37	0.23	0.15
Employee benefits	0.35	0.34	0.08	0.07	0.15	0.29
Advertising	0.44	0.36	0.62	1.13	0.80	0.83
Travel and entertainment	0.76	0.72	0.64	0.17	0.74	0.79
Other selling expenses	0.74	0.68	1.18	0.57	0.21	0.52
TOTAL SELLING EXPENSES	8.53	7.66	4.71	3.68	5.86	4.55

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
2.03%	1.40%	2.03%	1.63%	1.83%	1.88%	1.72%	1.89%
18.82	17.77	18.17	16.37	17.16	15.74	16.16	14.91
1.46	1.98	1.42	1.10	2.07	1.55	2.68	2.92
0.66	0.59	0.93	0.69	0.85	0.84	0.90	0.93
1.81	1.28	1.81	1.50	1.72	1.45	1.59	1.49
1.68	1.41	2.00	1.97	2.45	2.18	2.77	3.01
26.46	24.43	26.36	23.26	26.08	23.64	25.82	25.15
0.21	0.22	0.23	0.23	0.20	0.21	0.28	0.29
4.03	4.33	3.65	3.71	3.46	3.47	3.03	2.99
0.19	0.28	0.21	0.23	0.20	0.21	0.22	0.19
0.21	0.22	0.19	0.19	0.20	0.12	0.18	0.17
0.99	0.91	0.63	0.46	0.49	0.47	0.30	0.26
2.34	1.63	1.48	1.44	1.16	1.01	0.68	0.56
1.10	0.82	1.06	0.82	1.19	1.06	1.33	1.26
1.19	0.76	0.62	0.47	0.55	0.13	0.46	0.26
10.26	9.17	8.07	7.55	7.45	6.68	6.48	5.98
1.49	0.99	1.82	1.58	2.01	1.86	2.29	2.33
0.92	1.05	1.06	0.87	1.05	1.05	0.94	1.06
1.50	1.32	1.34	1.53	1.45	1.52	1.43	1.15
0.42	0.19	0.64	0.65	0.68	0.72	0.84	1.22
4.33	3.55	4.86	4.63	5.19	5.15	5.50	5.76
14.59	12.72	12.93	12.18	12.64	11.83	11.98	11.74
4.32	4.71	3.09	3.32	2.41	2.76	1.37	1.68
3.48	2.41	2.64	2.24	1.83	1.52	1.55	1.52
0.56	0.30	0.41	0.34	0.27	0.25	0.19	0.19
0.66	0.36	0.55	0.47	0.58	0.43	0.44	0.58
0.39	0.33	0.51	0.42	0.49	0.40	0.36	0.33
0.61	0.69	0.53	0.48	0.35	0.33	0.29	0.25
0.66	0.62	0.68	0.53	0.56	0.53	0.44	0.45
0.22	0.19	0.18	0.21	0.08	0.16	0.08	0.11
0.61	0.41	0.45	0.34	0.41	0.35	0.29	0.25
1.68	0.84	1.55	1.72	1.42	1.24	1.26	1.29
13.19	10.86	10.59	10.07	8.40	7.97	6.27	6.65
1.30	0.99	1.32	0.94	1.13	1.25	0.77	0.78
3.37	2.81	4.64	4.52	4.39	4.57	3.69	3.32
0.56	0.34	0.76	0.39	0.81	0.72	0.87	0.93
0.34	0.16	0.39	0.30	0.33	0.27	0.27	0.26
0.27	0.17	0.39	0.36	0.41	0.45	0.35	0.34
0.49	0.52	0.46	0.34	0.40	0.26	0.28	0.24
0.80	0.94	0.84	0.85	0.72	0.61	0.63	0.61
0.66	0.72	0.79	0.53	0.74	0.45	0.82	1.03
7.79	6.65	9.59	8.23	8.93	8.58	7.68	7.51

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS						
CURRENT ASSETS						
Cash	6.63%	10.13%	5.47%	4.95%	11.40%	7.63%
Receivables	32.42	29.42	16.23	20.51	28.17	40.75
Inventories	11.63	10.40	7.71	7.71	9.13	2.94
Other current assets	3.89	5.76	1.70	0.26	4.46	6.73
TOTAL CURRENT ASSETS	54.57	55.71	31.11	33.43	53.16	58.05
FIXED ASSETS						
Real estate	9.57	9.78	2.03	4.57	4.87	0.00
Less: Accumulated depreciation	2.96	3.01	2.03	4.57	2.41	0.00
	6.61	6.77	0.00	0.00	2.46	0.00
Machinery and equipment	69.58	66.00	114.83	112.23	84.73	79.60
Less: Accumulated depreciation	38.59	34.91	60.05	57.66	48.95	44.79
	30.99	31.09	54.78	54.57	35.78	34.81
Other fixed assets	8.36	6.13	18.46	22.94	8.97	9.28
Less: Accumulated depreciation	4.63	3.19	8.54	11.00	4.82	5.79
	3.73	2.94	9.92	11.94	4.15	3.49
NET FIXED ASSETS	41.33	40.80	64.70	66.51	42.39	38.30
OTHER ASSETS	4.10	3.49	4.19	0.06	4.45	3.65
TOTAL ASSETS	100.00	100.00	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY						
CURRENT LIABILITIES						
Notes payable	9.65	5.86	12.73	12.31	10.08	26.95
Accounts payable	14.12	10.69	11.19	11.73	12.71	13.68
Other current liabilities	8.16	8.46	6.36	7.19	3.79	5.43
TOTAL CURRENT LIABILITIES	31.93	25.01	30.28	31.23	26.58	46.06
LONG-TERM LIABILITIES	30.04	20.82	49.27	33.74	28.34	12.64
TOTAL LIABILITIES	61.97	45.83	79.55	64.97	54.92	58.70
SHAREHOLDERS' AND PROPRIETORS' EQUITY	38.03	54.17	20.45	35.03	45.08	41.30
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.71	2.23	1.03	1.07	2.00	1.26
QUICK RATIO	1.34	1.81	0.77	0.82	1.66	1.20
TOTAL LIABILITIES TO EQUITY	1.63	0.85	3.89	1.85	1.22	1.42
LONG-TERM LIABILITIES TO EQUITY	0.79	0.38	2.41	0.96	0.63	0.31
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.55	0.53	0.52	0.51	0.58	0.56

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
7.64%	10.04%	7.27%	10.66%	6.01%	14.54%	3.95%	6.43%
35.24	31.93	32.99	29.55	32.35	29.28	30.14	27.99
8.89	6.03	11.05	9.12	13.44	12.15	14.66	13.71
4.17	5.84	4.17	8.54	3.38	4.08	3.57	4.72
55.94	53.84	55.48	57.87	55.18	60.05	52.32	52.85
8.33	8.32	9.12	7.95	10.77	10.71	12.01	13.15
2.45	2.79	2.84	2.19	3.41	3.88	3.42	3.33
5.88	5.53	6.28	5.76	7.36	6.83	8.59	9.82
75.38	76.27	69.29	65.47	66.44	63.68	61.04	56.44
46.41	42.27	39.21	35.97	35.43	34.93	28.57	26.09
28.97	34.00	30.08	29.50	31.01	28.75	32.47	30.35
10.74	8.32	9.62	6.21	6.18	4.86	4.92	3.79
5.90	3.68	5.58	3.34	3.37	2.97	2.49	1.89
4.84	4.64	4.04	2.87	2.81	1.89	2.43	1.90
39.69	44.17	40.40	38.13	41.18	37.47	43.49	42.07
4.37	1.99	4.12	4.00	3.64	2.48	4.19	5.08
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
9.55	7.88	9.75	4.80	9.79	4.89	9.13	4.25
15.10	11.39	13.78	10.16	14.43	11.26	13.87	9.99
6.93	6.00	7.83	8.55	9.49	8.79	9.79	9.92
31.58	25.27	31.36	23.51	33.71	24.94	32.79	24.16
30.99	22.68	29.71	20.68	30.06	19.25	28.82	20.52
62.57	47.95	61.07	44.19	63.77	44.19	61.61	44.68
37.43	52.05	38.93	55.81	36.23	55.81	38.39	55.32
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1.77	2.13	1.77	2.46	1.64	2.41	1.60	2.19
1.49	1.89	1.42	2.07	1.24	1.92	1.15	1.62
1.67	0.92	1.57	0.79	1.76	0.79	1.60	0.81
0.83	0.44	0.76	0.37	0.83	0.34	0.75	0.37
0.62	0.55	0.57	0.55	0.53	0.55	0.47	0.46

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT						
Average assets per employee - All employees	$ 40,636	$ 49,278	$ 21,672	$ 27,480	$ 22,029	$ 20,269
Average assets per factory employee (Excluding Executives)	58,780	72,860	29,147	32,134	34,844	29,996
Average net worth per employee - All employees	15,838	27,152	4,711	9,063	9,909	7,370
Average gross plant investment per factory employee (Excluding Executives)	49,481	55,020	37,566	42,860	33,035	28,725
Net worth percentage of fixed assets	125.59%	181.93%	34.86%	67.21%	176.30%	145.60%
EMPLOYEES						
Percent factory - All employees	74.10%	76.01%	78.34%	85.83%	69.25%	78.51%
Percent administrative - All employees	13.84	12.68	15.86	10.00	22.49	17.29
Percent sales - All employees	12.06	11.31	5.80	4.17	8.26	4.20
SALES - VALUE OF PRODUCT PRODUCED						
INCLUDING EXECUTIVES						
Sales per employee - All employees	$ 78,291	$ 85,796	$ 57,415	$ 64,757	$ 52,418	$ 55,098
Sales per factory employee	108,566	124,021	73,472	74,500	78,487	70,694
Sales less material per factory employee	66,497	77,540	47,861	48,748	52,911	48,236
Sales per administrative employee	736,254	842,453	179,560	24,113	267,075	507,977
EXCLUDING EXECUTIVES						
Sales per employee - All employees	86,514	94,454	67,803	67,168	62,251	71,143
Sales per factory employee	114,648	129,948	77,999	74,500	82,751	79,297
Sales less material per factory employee	70,251	81,388	50,903	48,748	55,815	54,153
SALES PER SALESMAN	789,566	1,038,850	81,000	108,000	92,604	0
SALES TO CURRENT ASSETS	447%	386%	2,424%	1,283%	795%	483%
PAYROLL - INCLUDING TAXES AND BENEFITS						
INCLUDING EXECUTIVES						
Total payroll percentage of sales	39.23%	35.40%	32.05%	26.16%	41.73%	31.40%
Factory payroll percentage of gross plant investment	83.48	61.47	55.78	39.10	104.45	75.74
Payroll per employee - All employees	$ 29,655	$ 29,717	$ 17,403	$ 15,453	$ 20,849	$ 17,267
Payroll per factory employee	26,834	26,536	17,188	15,013	19,104	16,339
Payroll per administrative employee	35,869	38,834	12,618	3,092	23,410	19,526
Payroll per sales employee	42,791	45,382	7,740	7,185	17,370	19,771
PAYROLL - EXCLUDING TAXES AND BENEFITS						
EXCLUDING EXECUTIVES						
Payroll per employee - All employees	$ 22,921	$ 22,618	$ 13,905	$ 12,284	$ 15,973	$ 14,046
Payroll per factory employee	21,908	21,566	13,898	11,975	16,135	14,151
Payroll per administrative employee	18,120	17,080	4,481	2,269	11,858	10,828
Payroll per sales employee	34,131	36,175	4,051	5,449	9,271	0
EXECUTIVE PAYROLL						
Payroll per executive - All executives	54,385	63,504	10,490	3,411	26,025	21,989
Payroll per factory executive	35,524	35,752	3,426	0	10,326	15,304
Payroll per administrative executive	64,983	81,330	10,980	3,411	21,804	13,463
Payroll per sales executive	46,149	48,295	2,458	0	9,747	18,168
RECEIVABLES						
Collection period	58.0	59.4	25.8	33.5	43.0	50.4
PROFIT						
Gross profit percentage of sales	23.23%	27.84%	22.09%	24.56%	24.11%	24.99%
Average gross profit per factory employee	$ 27,294	$ 38,714	$ 17,837	$ 18,242	$ 20,441	$ 19,869
Income before taxes percentage of sales	3.42%	11.49%	5.94%	12.53%	1.90%	8.90%
Average income before taxes per employee	$ 2,943	$ 9,908	$ 3,875	$ 8,337	$ 1,331	$ 4,920

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 27,366	$ 32,345	$ 38,331	$ 49,415	$ 47,319	$ 54,046	$ 57,939	$ 59,653
43,151	47,696	57,099	72,690	66,314	79,571	78,404	89,900
10,850	15,794	15,272	27,776	17,811	30,955	22,347	33,400
39,747	42,584	49,984	57,667	55,012	60,807	57,736	57,837
161.10%	201.14%	126.28%	207.78%	102.04%	187.56%	104.26%	152.88%
69.22%	72.06%	72.06%	72.43%	76.96%	75.81%	81.22%	81.13%
18.79	17.70	14.42	14.66	10.81	11.41	8.45	8.61
11.99	10.24	13.52	12.91	12.23	12.78	10.33	10.26
$ 61,063	$ 67,051	$ 75,142	$ 82,094	$ 87,709	$ 94,892	$ 100,408	$ 97,593
91,098	97,277	106,460	116,155	116,614	131,675	132,208	151,279
59,038	61,896	66,932	75,965	70,447	82,127	73,824	89,941
366,603	409,497	593,064	683,921	891,384	869,715	1,396,080	1,362,547
70,478	78,637	83,477	90,541	95,336	103,975	107,246	104,437
96,747	101,229	112,784	122,394	122,944	138,763	138,531	157,430
62,684	64,416	70,941	80,162	74,219	86,622	77,418	93,873
272,776	330,979	513,700	488,850	853,266	937,171	1,729,848	1,945,586
487%	461%	399%	337%	378%	327%	375%	343%
41.33%	36.67%	40.55%	36.14%	38.23%	35.87%	35.30%	34.76%
116.74	73.09	77.08	61.44	72.61	58.32	67.52	58.67
$ 24,752	$ 23,708	$ 29,838	$ 29,442	$ 32,861	$ 33,522	$ 33,975	$ 32,745
23,010	21,618	26,993	26,466	29,262	29,691	30,453	28,793
29,971	31,170	35,008	37,116	42,302	42,552	41,275	47,360
27,959	23,377	42,058	42,125	51,911	58,135	58,607	56,820
$ 19,176	$ 18,832	$ 23,126	$ 22,199	$ 25,074	$ 25,253	$ 26,451	$ 24,784
19,203	18,656	22,115	21,417	23,587	24,156	24,463	22,786
16,038	12,946	18,507	17,961	19,303	17,207	20,612	20,578
20,583	17,161	33,982	34,175	41,814	47,070	48,523	46,178
38,341	37,212	54,025	67,110	65,903	76,203	69,395	73,774
22,973	15,958	36,261	36,150	42,035	41,541	48,560	47,452
39,964	39,362	61,347	77,634	84,642	106,058	91,409	102,149
20,325	13,370	40,765	34,433	59,757	61,285	81,348	80,125
53.8	57.0	58.8	60.8	62.3	59.7	61.8	62.6
24.53%	28.23%	24.47%	29.80%	22.65%	27.88%	19.90%	26.06%
$ 24,464	$ 29,570	$ 27,960	$ 36,858	$ 28,399	$ 39,842	$ 30,050	$ 48,894
2.49%	11.54%	3.03%	11.64%	4.06%	11.32%	4.68%	11.53%
$ 1,651	$ 7,726	$ 2,464	$ 9,552	$ 3,704	$ 10,959	$ 4,791	$ 11,229

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT						
Current Assets:						
Cash	$ 3.47	$ 6.08	$ 2.19	$ 2.16	$ 4.87	$ 3.00
Receivables	15.43	15.71	6.20	7.19	11.65	13.81
Inventories	5.71	5.81	3.16	2.68	3.73	0.94
Marketable securities	0.83	1.41	0.00	0.00	1.16	0.00
Other current assets	1.42	2.61	0.46	0.11	1.37	3.04
	26.86	31.62	12.01	12.14	22.78	20.79
Plant Investment:						
Land and building	5.80	6.45	0.78	1.77	2.07	0.00
Machinery and equipment	35.06	36.71	44.24	51.26	35.05	30.20
Other fixed assets	3.97	3.03	6.10	7.06	4.38	3.52
	44.83	46.19	51.12	60.09	41.50	33.72
Non-Current Assets	2.28	2.12	1.78	0.04	1.91	1.17
TOTAL INVESTMENT	73.97	79.93	64.91	72.27	66.19	55.68
INVESTMENT TURNOVER PER $100 OF SALES	135.19%	125.11%	154.06%	138.37%	151.08%	179.60%
EARNINGS						
Cost of Product	$76.77	$72.16	$ 77.91	$75.44	$75.89	$75.01
Selling Expenses	8.53	7.66	4.71	3.68	5.86	4.55
Administrative Expenses	10.08	8.73	10.15	7.32	15.51	11.07
	95.38	88.55	92.77	86.44	97.26	90.63
Income Before Interest, Other Income (Expense) and Taxes	4.62	11.45	7.23	13.56	2.74	9.37
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.25%	14.33%	11.14%	18.76%	4.14%	16.83%

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 3.54	$ 4.51	$ 3.72	$ 6.11	$ 3.71	$ 9.97	$ 2.43	$ 4.17
14.42	15.10	15.66	16.21	16.48	15.77	16.38	16.60
3.79	2.86	5.35	5.01	6.69	6.84	8.06	8.24
1.11	1.55	0.65	1.67	0.78	1.28	0.90	1.42
1.17	1.29	1.71	4.80	1.21	1.70	1.42	2.06
24.03	25.31	27.09	33.80	28.87	35.56	29.19	32.49
5.23	5.59	5.45	5.89	6.61	7.12	7.33	8.02
33.24	36.32	35.42	38.04	35.92	36.68	34.91	34.49
4.40	3.74	4.80	3.34	3.10	2.67	2.58	2.11
42.87	45.65	45.67	47.27	45.63	46.47	44.82	44.62
2.15	1.23	2.21	2.36	2.13	1.27	2.86	3.44
69.05	72.19	74.97	83.43	76.63	83.30	76.87	80.55
144.82%	138.52%	133.39%	119.86%	130.50%	120.05%	130.09%	124.15%
$75.47	$71.77	$75.53	$70.20	$77.35	$72.12	$80.10	$73.94
7.79	6.65	9.59	8.23	8.93	8.58	7.68	7.51
13.19	10.86	10.59	10.07	8.40	7.97	6.27	6.65
96.45	89.28	95.71	88.50	94.68	88.67	94.05	88.10
3.55	10.72	4.29	11.50	5.32	11.33	5.95	11.90
5.14%	14.85%	5.72%	13.78%	6.94%	13.60%	7.74%	14.77%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING** TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL FIRMS	826	$ 4,648,000	$ 7,873,000	$ 362,000
TOTAL - PROFIT LEADERS*	139	6,909,000	11,046,000	1,282,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$250,000	9	74,000	195,000	13,000
$250,000-$500,000	34	162,000	386,000	8,000
$500,000-$1,500,000	170	463,000	1,008,000	27,000
$1,500,000-$5,000,000	295	1,576,000	3,044,000	91,000
$5,000,000-$10,000,000	166	3,904,000	7,092,000	282,000
Over $10,000,000	152	17,376,000	27,905,000	1,450,000
PROFIT LEADERS				
0-$250,000	4	84,000	190,000	24,000
$250,000-$500,000	3	138,000	374,000	33,000
$500,000-$1,500,000	22	519,000	1,022,000	118,000
$1,500,000-$5,000,000	40	1,740,000	2,795,000	321,000
$5,000,000-$10,000,000	33	4,253,000	7,109,000	798,000
Over $10,000,000	37	19,952,000	31,478,000	3,681,000

---

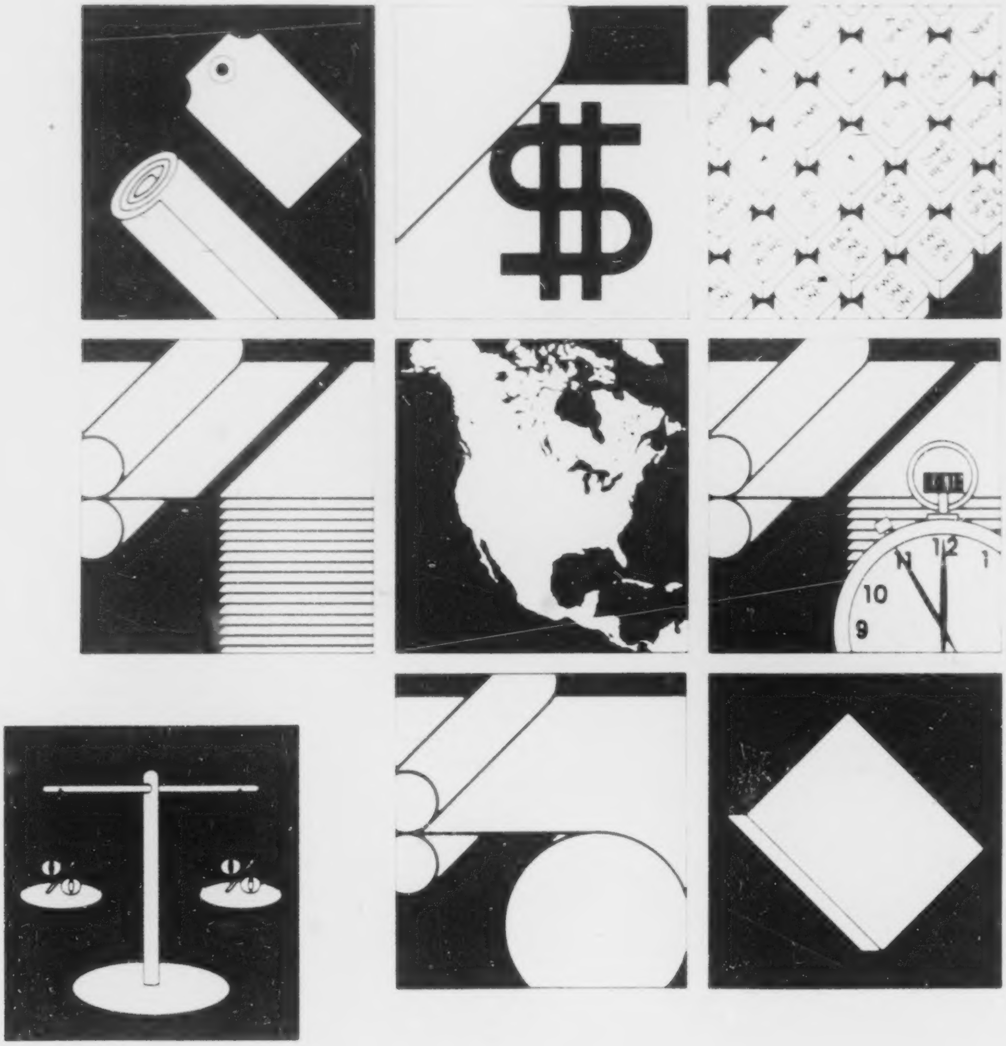
* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See explanatory note on page 3.

A8740-1.3U

12/87

1987 Financial Ratio Study



Volume III

All Printers By Product Specialty

Volume III: All Printers By Product Specialty

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA **PRINTING INDUSTRIES OF AMERICA, INC.**

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

Offices:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 826 printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by product specialty - for example, Commercial and Advertising, Magazine and Periodical, Newspaper, etc. Readers can compare their firm's operations with other firms having the same product specialty in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD 2

VALUE ADDED -- WHAT IT MEANS TO YOU 4- 5

ALL PRINTERS BY PRODUCT SPECIALTY 6-19
- Commercial and Advertising
- Magazine and Periodical
- Newspaper
- Financial
- Direct Mail-Catalog
- Directory
- Label
- Packaging

Report on Operations - Value Added = 100% 6- 7
Supporting Schedules - Value Added = 100% 8- 9
Report on Operations - Sales = 100% 10-11
Supporting Schedules - Sales = 100% 10-13
Balance Sheet 14-15
Significant Facts 16-17
Return on Investment - Per $100 of Sales 18-19

ABSOLUTE DATA 20

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales Firm's Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%
B	500,000	100,000	20.0
C	8,000,000	975,000	12.2

62.2% divided by 3 = 20.7%

= PIA Factory Payroll Ratio

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

ALL PRINTERS BY PRODUCT SPECIALTY

REPORT ON OPERATIONS - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	41.29	36.12	45.53	41.03	49.52
FACTORY EXPENSES	21.20	19.45	23.76	21.64	22.35
TOTAL FACTORY COST OF PRODUCT	62.49	55.57	69.29	62.67	71.87
GROSS PROFIT	37.51	44.43	30.71	37.33	28.13
ADMINISTRATIVE AND SELLING EXPENSES					
Administrative expenses	16.33	14.06	11.67	9.30	14.32
Selling expenses	14.08	12.58	8.10	6.53	5.78
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	30.41	26.64	19.77	15.83	20.10
INCOME (LOSS) BEFORE INTEREST EXPENSE	7.10	17.79	10.94	21.50	8.03
Interest expense	3.09	2.00	4.56	2.78	2.75
OPERATING INCOME (LOSS)	4.01	15.79	6.38	18.72	5.28
Other income (expense)	1.10	1.97	1.67	3.01	0.93
INCOME (LOSS) BEFORE INCOME TAXES	5.11	17.76	8.05	21.73	6.21

---

* See page 10 for the definition of "Profit Leaders".
** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
X	X	X	X	X	X	X
X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
32.87	55.43	40.65	26.41	41.77	40.29	41.84
20.26	27.36	17.01	11.84	18.84	16.37	20.92
53.13	82.79	57.66	38.25	60.61	56.66	62.76
46.[illegible]	17.21	42.34	61.75	39.39	43.34	37.24
16.52	14.26	16.88	27.22	14.76	12.29	13.05
10.72	3.36	12.54	21.60	13.22	11.96	12.71
27.24	17.62	29.42	48.82	27.98	24.25	25.76
19.63	(0.41)	12.92	12.93	11.41	19.09	11.48
1.54	0.09	2.74	0.91	2.76	1.55	2.78
18.09	(0.50)	10.18	12.02	8.65	17.54	8.70
0.82	(0.85)	2.39	3.86	1.19	1.26	(0.42)
18.91	(1.35)	12.57	15.88	9.84	18.80	8.28

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL					
Salaries - executive	3.01%	2.66%	3.08%	2.95%	2.09%
Direct wages	28.34	24.81	29.21	24.57	28.88
General factory salaries and wages	2.60	2.38	4.76	5.25	8.11
Packing, shipping and delivery wages	1.31	1.16	1.21	0.86	1.43
Payroll taxes	2.83	2.28	2.89	2.98	2.49
Employee benefits	3.20	2.83	4.38	4.42	6.52
TOTAL FACTORY PAYROLL	41.29	36.12	45.53	41.03	49.52
FACTORY EXPENSES					
Fixed Expenses					
Depreciation - real estate	0.32	0.29	0.56	0.53	0.69
Depreciation - other	5.91	5.94	6.38	5.33	6.51
Taxes - real estate	0.31	0.38	0.31	0.24	0.49
Taxes - other	0.32	0.26	0.29	0.18	0.27
Insurance	1.10	0.92	0.59	0.39	0.83
Building rent	2.63	2.30	1.22	0.46	2.79
Utilities - heat, light, etc.	1.82	1.54	2.71	2.52	1.77
Equipment rental	1.19	0.79	1.30	0.93	1.22
Total Fixed Expenses	13.60	12.42	13.36	11.58	14.57
Other Expenses					
Factory supplies and expense	2.34	2.47	4.44	4.27	2.51
Packing, shipping and delivery expense	1.63	1.63	1.63	1.97	1.43
Repairs and maintenance	2.25	2.16	2.64	2.07	3.36
Other factory expenses	0.88	0.77	1.69	1.75	0.48
Total Other Expenses	7.60	7.03	10.40	10.06	7.78
TOTAL FACTORY EXPENSES	21.20	19.45	23.76	21.64	22.35
ADMINISTRATIVE EXPENSES					
Salaries - executive	4.97	5.03	2.74	2.44	5.52
Salaries - office	4.02	3.00	2.89	2.57	3.28
Payroll taxes	0.64	0.43	0.40	0.37	0.71
Employee benefits	0.39	0.63	0.70	0.85	0.85
Bad debts	0.72	0.67	0.91	0.58	0.35
Office supplies and expenses	0.76	0.70	0.58	0.57	0.76
Professional fees	0.99	0.94	0.75	0.48	0.73
Taxes - business	0.26	0.27	0.13	0.05	0.13
Telephone	0.76	0.56	0.57	0.45	0.62
Other administrative expenses	2.32	1.83	2.00	0.94	1.37
TOTAL ADMINISTRATIVE EXPENSES	16.33	14.06	11.67	9.30	14.32
SELLING EXPENSES					
Salaries - executive	1.98	1.66	0.87	0.71	1.51
Salaries and commissions - salesmen	6.70	6.35	2.80	2.07	2.39
Salaries - sales office clerical	1.12	0.80	1.28	1.09	0.06
Payroll taxes	0.56	0.43	0.31	0.26	0.20
Employee benefits	0.55	0.50	0.40	0.31	0.39
Advertising	0.71	0.59	0.56	0.32	0.36
Travel and entertainment	1.27	1.23	1.01	0.72	0.22
Other selling expenses	1.19	1.02	0.87	1.05	0.65
TOTAL SELLING EXPENSES	14.08	12.58	8.10	6.53	5.78

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
0.45%	5.79%	4.19%	1.81%	2.50%	2.36%	4.03%
24.57	34.18	26.37	19.23	26.83	24.10	25.03
3.70	2.92	3.59	2.07	2.79	2.69	1.57
0.97	0.23	1.24	0.49	1.67	2.22	5.34
1.46	4.11	2.48	1.78	2.66	2.45	1.64
1.72	8.20	2.78	1.03	5.32	6.47	4.23
32.87	55.43	40.65	26.41	41.77	40.29	41.84
0.15	0.58	0.24	0.37	0.32	0.55	0.32
5.34	9.09	4.14	2.42	4.88	4.06	2.87
0.19	0.55	0.30	0.23	0.37	0.21	0.46
0.30	0.04	0.39	0.30	0.21	0.37	0.00
0.27	0.54	0.76	1.69	0.84	0.44	0.66
1.95	1.09	1.01	0.62	1.67	1.06	3.52
1.08	2.13	1.72	1.72	1.81	1.74	1.48
1.01	1.59	0.43	0.00	0.50	0.01	0.02
10.29	15.61	8.99	7.36	10.60	8.44	9.33
2.41	4.82	2.42	1.43	3.15	2.84	3.48
0.14	2.39	1.25	0.12	2.06	2.13	3.20
1.88	4.16	3.36	2.74	1.79	1.96	1.31
5.54	0.38	0.99	0.19	1.24	1.00	3.60
9.97	11.75	8.02	4.48	8.24	7.93	11.59
20.26	27.36	17.01	11.84	18.84	16.37	20.92
4.17	3.27	5.56	10.03	4.36	3.63	2.62
2.20	3.84	3.00	4.89	3.31	2.63	3.93
0.28	0.55	0.56	0.91	0.50	0.42	0.43
0.38	0.74	0.82	1.78	0.75	0.95	0.36
0.64	0.62	0.90	1.03	0.43	0.06	1.71
0.69	0.45	0.41	0.35	0.75	0.51	0.54
0.99	1.18	1.59	2.40	0.97	0.44	0.31
0.14	0.05	0.32	0.27	0.18	0.19	0.03
0.45	0.34	0.45	0.54	0.76	0.48	0.12
6.58	3.22	3.27	5.02	2.75	2.98	3.00
16.52	14.26	16.88	27.22	14.76	12.29	13.05
0.24	0.12	2.21	3.43	1.58	2.00	0.73
5.96	0.95	6.52	13.98	6.06	5.66	4.52
0.58	0.50	1.35	0.70	1.25	0.84	3.65
~~0.24~~	0.27	0.63	1.22	0.42	0.24	0.22
0.40	0.49	0.23	0.07	0.76	0.88	0.35
0.72	0.32	0.54	0.66	0.60	0.40	0.13
0.99	0.61	0.48	0.65	1.19	0.85	0.41
1.59	0.10	0.58	0.89	1.36	1.09	2.70
10.72	3.36	12.54	21.60	13.22	11.96	12.71

REPORT ON OPERATIONS - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT					
MATERIALS					
Paper	22.75	21.71	28.57	25.63	32.06
Other chargeable materials	4.91	4.46	6.93	6.27	5.17
Outside services	9.12	8.98	4.86	5.46	2.90
TOTAL MATERIALS	36.78	35.15	40.36	37.36	40.13
FACTORY PAYROLL	26.06	23.42	27.00	25.95	28.62
FACTORY EXPENSES	13.39	12.64	14.13	13.50	13.76
TOTAL FACTORY COST OF PRODUCT	76.23	71.21	81.49	76.81	82.51
GROSS PROFIT	23.77	28.79	18.51	23.19	17.49
ADMINISTRATIVE AND SELLING EXPENSES					
Administrative expenses	10.43	9.21	6.99	5.74	8.70
Selling expenses	8.90	8.17	4.76	4.16	4.08
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	19.33	17.38	11.75	9.90	12.78
INCOME (LOSS) BEFORE INTEREST EXPENSE	4.44	11.41	6.76	13.29	4.71
Interest expense	1.93	1.28	2.67	1.75	1.56
OPERATING INCOME (LOSS)	2.51	10.13	4.09	11.54	3.15
Other income (expense)	0.71	1.26	0.95	1.69	0.51
INCOME (LOSS) BEFORE INCOME TAXES	3.22	11.39	5.04	13.23	3.66

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
OTHER CHARGEABLE MATERIALS					
Ink	1.53%	1.33%	3.46%	2.39%	1.56%
Film	1.11	1.10	1.11	1.09	1.53
Plates	1.09	1.00	1.30	1.23	1.04
Other chargeable materials	1.18	1.03	1.06	1.56	1.04
TOTAL OTHER CHARGEABLE MATERIALS	4.91	4.46	6.93	6.27	5.17
OUTSIDE SERVICES					
Composition	0.80	1.23	0.55	0.25	0.03
Offset preparation	1.41	1.33	0.84	1.17	0.47
Printing	2.24	2.20	0.89	1.36	1.16
Binding	2.35	2.10	1.33	0.50	0.33
Other outside services	2.32	2.12	1.25	2.18	0.91
TOTAL OUTSIDE SERVICES	9.12	8.98	4.86	5.46	2.90

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Sample insufficient for Profit Leaders.
*** Information not submitted.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
12.63	41.87	29.94	20.55	26.28	25.87	24.30
2.94	4.07	5.42	3.85	6.49	7.39	5.16
10.77	10.93	6.01	14.22	5.45	3.86	10.58
26.34	56.87	41.37	38.62	38.22	37.12	40.04
24.13	23.98	24.43	18.48	25.53	25.35	24.99
15.08	11.82	10.07	8.23	11.70	10.29	12.54
65.55	92.67	75.87	65.33	75.45	72.76	77.57
34.45	7.33	24.13	34.67	24.55	27.24	22.43
11.49	6.10	9.69	15.34	9.34	7.83	7.94
8.45	1.48	7.20	11.52	8.18	7.41	7.64
19.94	7.58	16.89	26.86	17.52	15.24	15.58
14.51	(0.25)	7.24	7.81	7.03	12.00	6.85
1.18	0.04	1.60	0.62	1.67	0.98	1.66
13.33	(0.29)	5.64	7.19	5.36	11.02	5.19
0.58	(0.38)	1.37	2.52	0.72	0.77	(0.36)
13.91	(0.67)	7.01	9.71	6.08	11.79	4.83

0.23%	2.14%	1.46%	0.81%	2.72%	2.44%	1.85%
0.02	0.65	0.87	0.68	0.72	0.97	0.12
0.53	0.66	1.01	0.93	0.97	1.30	1.23
2.16	0.62	2.08	1.43	2.08	2.68	1.96
2.94	4.07	5.42	3.85	6.49	7.39	5.16
4.64	0.01	0.44		0.50	0.61	5.80
5.15	0.15	0.33		0.50	0.53	0.55
0.00	4.52	2.60		2.64	1.74	0.55
0.00	2.06	1.72		1.16	0.76	0.13
0.98	4.19	0.92		0.65	0.22	3.55
10.77	10.93	6.01	***	5.45	3.86	10.58

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL					
Salaries - executive	1.90%	1.73%	1.86%	1.87%	1.32%
Direct wages	17.92	16.16	17.34	15.62	16.94
General factory salaries and wages	1.62	1.51	2.73	3.24	4.45
Packing, shipping and delivery wages	0.81	0.73	0.72	0.52	0.84
Payroll taxes	1.80	1.48	1.75	1.89	1.43
Employee benefits	2.01	1.81	2.60	2.81	3.64
TOTAL FACTORY PAYROLL	26.06	23.42	27.00	25.95	28.62
FACTORY EXPENSES					
Fixed Expenses					
Depreciation - real estate	0.21	0.19	0.35	0.34	0.41
Depreciation - other	3.71	3.86	3.34	3.98	3.94
Taxes - real estate	0.20	0.25	0.18	0.16	0.27
Taxes - other	0.20	0.17	0.18	0.11	0.17
Insurance	0.70	0.61	0.85	0.25	0.48
Building rent	1.69	1.50	0.71	0.31	2.03
Utilities - heat, light, etc.	1.14	0.99	1.59	1.55	1.01
Equipment rental	0.76	0.53	0.76	0.55	0.64
Total Fixed Expenses	8.61	8.10	7.96	7.25	8.95
Other Expenses					
Factory supplies and expense	1.80	1.60	2.65	2.69	1.62
Packing, shipping and delivery expense	1.02	1.04	0.96	1.22	0.92
Repairs and maintenance	1.41	1.40	1.54	1.26	1.95
Other factory expenses	0.55	0.50	1.02	1.08	0.32
Total Other Expenses	4.78	4.54	6.17	6.25	4.81
TOTAL FACTORY EXPENSES	13.39	12.64	14.13	13.50	13.76
ADMINISTRATIVE EXPENSES					
Salaries - executive	3.20	3.33	1.69	1.51	3.29
Salaries - office	2.57	1.96	1.72	1.55	2.07
Payroll taxes	0.41	0.28	0.24	0.22	0.42
Employee benefits	0.57	0.41	0.42	0.52	0.50
Bad debts	0.45	0.43	0.53	0.35	0.22
Office supplies and expenses	0.49	0.46	0.34	0.37	0.43
Professional fees	0.63	0.61	0.45	0.32	0.41
Taxes - business	0.16	0.17	0.08	0.03	0.08
Telephone	0.48	0.36	0.34	0.28	0.89
Other administrative expenses	1.47	1.20	1.18	0.59	0.39
TOTAL ADMINISTRATIVE EXPENSES	10.43	9.21	6.99	5.74	8.70
SELLING EXPENSES					
Salaries - executive	1.24	1.08	0.50	0.43	0.99
Salaries and commissions - salesmen	4.24	4.11	1.62	1.27	1.81
Salaries - sales office clerical	0.71	0.53	0.76	0.72	0.04
Payroll taxes	0.36	0.28	0.18	0.16	0.14
Employee benefits	0.35	0.33	0.24	0.20	0.26
Advertising	0.46	0.38	0.34	0.20	0.22
Travel and entertainment	0.80	0.80	0.59	0.46	0.13
Other selling expenses	0.74	0.66	0.53	0.72	0.49
TOTAL SELLING EXPENSES	8.90	8.17	4.76	4.16	4.08

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
0.34%	2.49%	2.65%	1.29%	1.56%	1.50%	2.42%
18.06	14.77	15.95	13.74	16.47	15.11	14.87
2.64	1.27	2.07	1.12	1.65	1.72	0.91
0.74	0.10	0.73	0.35	1.03	1.42	3.30
1.08	1.78	1.53	1.24	1.62	1.53	1.01
1.27	3.57	1.50	0.74	3.20	4.07	2.48
24.13	23.98	24.43	18.48	25.53	25.35	24.99
0.11	0.25	0.14	0.25	0.19	0.34	0.19
3.90	3.95	2.42	1.69	3.07	2.55	1.71
0.15	0.24	0.15	0.15	0.22	0.13	0.27
0.23	0.02	0.26	0.21	0.13	0.24	0.00
0.20	0.23	0.51	1.19	0.52	0.27	0.40
1.40	0.46	0.63	0.41	1.10	0.71	2.07
0.81	0.93	0.98	1.22	1.10	1.09	0.89
0.77	0.67	0.27	0.00	0.33	0.01	0.01
7.57	6.75	5.36	5.12	6.66	5.34	5.54
1.80	2.09	1.38	0.96	1.91	1.82	2.10
0.08	1.01	0.69	0.08	1.21	1.21	1.95
1.39	1.81	2.01	1.93	1.11	1.24	0.78
4.24	0.16	0.63	0.14	0.81	0.68	2.17
7.51	5.07	4.71	3.11	5.04	4.95	7.00
15.08	11.82	10.07	8.23	11.70	10.29	12.54
2.97	1.39	3.29	5.90	2.77	2.28	1.59
1.57	1.63	1.70	2.72	2.09	1.69	2.41
0.20	0.23	0.32	0.52	0.32	0.28	0.26
0.27	0.32	0.44	0.96	0.47	0.59	0.22
0.50	0.27	0.46	0.53	0.28	0.04	1.04
0.50	0.19	0.25	0.19	0.48	0.33	0.32
0.71	0.50	0.92	1.39	0.60	0.27	0.19
0.10	0.02	0.19	0.16	0.12	0.12	0.02
0.32	0.15	0.27	0.33	0.48	0.29	0.07
4.85	1.40	1.85	2.64	1.73	1.94	1.82
11.99	6.10	9.69	15.34	9.34	7.83	7.94
0.18	0.05	1.24	1.76	0.94	1.27	0.43
4.36	0.42	3.66	7.47	3.81	3.45	2.68
0.45	0.22	0.85	0.36	0.75	0.51	2.21
0.18	0.12	0.36	0.65	0.26	0.15	0.14
0.30	0.22	0.14	0.05	0.46	0.53	0.21
0.53	0.14	0.35	0.37	0.41	0.25	0.08
0.73	0.27	0.28	0.40	0.74	0.54	0.25
1.22	0.04	0.32	0.46	0.81	0.71	1.64
7.95	1.48	7.20	11.52	8.18	7.41	7.64

BALANCE SHEET

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS					
CURRENT ASSETS					
Cash	7.18%	11.30%	3.03%	6.21%	(1.06)%
Receivables	32.89	30.72	27.06	23.50	34.21
Inventories	10.74	8.85	12.79	12.09	11.75
Other current assets	3.75	5.00	5.20	7.94	2.78
TOTAL CURRENT ASSETS	54.56	55.87	48.08	49.74	47.68
FIXED ASSETS					
Real estate	8.65	8.02	12.62	12.50	29.85
Less: Accumulated depreciation	2.73	2.74	3.30	2.59	8.57
	5.92	5.28	9.32	9.91	21.28
Machinery and equipment	70.91	70.29	71.92	57.91	90.34
Less: Accumulated depreciation	39.40	38.01	35.08	26.39	66.51
	31.51	32.28	36.84	31.52	23.83
Other fixed assets	8.80	7.32	5.47	2.29	9.11
Less: Accumulated depreciation	4.87	3.70	3.12	1.48	4.51
	3.93	3.62	2.35	0.81	4.60
NET FIXED ASSETS	41.36	41.18	48.51	42.24	49.71
OTHER ASSETS	4.08	2.95	3.41	8.02	2.61
TOTAL ASSETS	100.00	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY					
CURRENT LIABILITIES					
Notes payable	9.62	6.34	9.52	5.46	13.28
Accounts payable	14.00	10.67	14.82	8.19	16.77
Other current liabilities	8.02	8.30	6.69	5.76	5.25
TOTAL CURRENT LIABILITIES	31.64	25.31	31.03	19.41	35.30
LONG-TERM LIABILITIES	30.65	21.01	32.56	23.42	31.34
TOTAL LIABILITIES	62.29	46.32	63.59	42.83	66.64
SHAREHOLDERS' AND PROPRIETORS' EQUITY	37.71	53.68	36.41	57.17	33.36
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.72	2.21	1.55	2.56	1.35
QUICK RATIO	1.38	1.86	1.14	1.94	1.02
TOTAL LIABILITIES TO EQUITY	1.65	0.86	1.75	0.75	2.00
LONG-TERM LIABILITIES TO EQUITY	0.81	0.39	0.89	0.41	0.94
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.56	0.54	0.49	0.46	0.74

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
2.48%	1.10%	14.99%	33.37%	3.49%	4.65%	2.80%
26.75	18.34	24.97	28.25	35.01	30.13	31.30
8.21	30.15	12.05	7.79	17.70	19.29	32.71
24.09	7.35	3.49	4.29	1.71	1.78	5.05
61.53	56.94	55.50	73.70	57.91	55.85	71.86
7.19	11.95	19.78	11.98	10.51	19.25	15.45
1.66	5.90	2.66	2.68	3.63	7.17	0.49
5.53	6.05	17.12	9.30	6.88	12.08	14.96
56.29	71.78	48.48	36.84	55.75	60.04	37.45
27.42	35.54	26.90	24.21	30.83	31.69	25.37
28.87	36.24	21.58	12.63	24.92	28.35	12.08
4.88	1.76	4.85	3.71	6.46	2.35	3.57
2.84	0.99	3.34	1.65	3.28	1.43	2.47
2.04	0.77	1.51	2.06	3.18	0.92	1.10
36.44	43.06	40.21	23.99	34.98	41.35	28.14
2.03	0.00	4.29	2.31	7.11	2.80	0.00
100.00	100.00	100.00	100.00	100.00	100.00	100.00
9.25	8.62	6.16	1.47	7.28	2.46	9.74
21.10	20.27	8.61	3.79	15.35	11.95	19.04
1.70	4.26	14.47	29.33	8.52	10.92	2.36
32.05	33.15	29.24	34.59	31.15	25.33	31.14
21.76	43.73	26.01	5.18	28.53	19.56	13.59
53.81	76.88	55.25	39.77	59.68	44.89	44.73
46.19	23.12	44.75	60.23	40.32	55.11	55.27
100.00	100.00	100.00	100.00	100.00	100.00	100.00

1.92	1.72	1.90	2.13	1.86	2.20	2.31
1.66	0.81	1.49	1.91	1.29	1.44	1.26
1.16	3.33	1.23	0.66	1.48	0.81	0.81
0.47	1.89	0.58	0.09	0.71	0.35	0.25
0.49	0.50	0.55	0.66	0.55	0.53	0.68

SIGNIFICANT FACTS

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT					
Average assets per employee - All employees	$ 39,621	$ 46,840	$ 52,306	$ 59,012	$ 29,513
Average assets per factory employee (Excluding Executives)	57,656	67,973	64,279	72,156	36,625
Average net worth per employee - All employees	15,381	25,538	19,407	36,406	11,696
Average gross plant investment per factory employee (Excluding Executives)	49,619	55,357	54,622	49,319	45,146
Net worth percentage of fixed assets	122.34%	173.59%	103.16%	180.06%	65.20%
EMPLOYEES					
Percent factory - All employees	72.97%	74.53%	84.45%	85.94%	82.39%
Percent administrative - All employees	14.46	13.64	9.07	8.39	11.95
Percent sales - All employees	12.57	11.83	6.48	5.67	5.66
SALES - VALUE OF PRODUCT PRODUCED					
INCLUDING EXECUTIVES					
Sales per employee - All employees	$ 78,055	$ 85,781	$ 82,396	$ 84,344	$ 63,286
Sales per factory employee	108,383	118,895	98,875	100,147	78,012
Sales less material per factory employee	67,111	75,886	57,439	60,453	47,153
Sales per administrative employee	699,202	772,237	1,108,592	1,179,918	564,630
EXCLUDING EXECUTIVES					
Sales per employee - All employees	86,577	95,059	88,667	91,012	69,327
Sales per factory employee	114,580	125,156	103,525	105,106	81,038
Sales less material per factory employee	70,969	80,010	60,216	63,422	49,317
SALES PER SALESMAN	659,256	797,181	2,544,937	2,853,541	592,208
SALES TO CURRENT ASSETS	462%	414%	391%	327%	539%
PAYROLL - INCLUDING TAXES AND BENEFITS					
INCLUDING EXECUTIVES					
Total payroll percentage of sales	39.71%	35.72%	34.37%	32.54%	38.13%
Factory payroll percentage of gross plant investment	86.41	61.06	56.78	57.73	56.07
Payroll per employee - All employees	$ 30,005	$ 29,998	$ 27,701	$ 26,531	$ 23,579
Payroll per factory employee	27,118	26,645	25,863	24,643	21,748
Payroll per administrative employee	35,880	38,446	36,359	40,499	31,266
Payroll per sales employee	43,068	45,448	42,551	40,467	30,034
PAYROLL - EXCLUDING TAXES AND BENEFITS					
EXCLUDING EXECUTIVES					
Payroll per employee - All employees	$ 23,215	$ 22,876	$ 21,539	$ 20,090	$ 17,676
Payroll per factory employee	22,217	21,342	20,881	19,392	17,349
Payroll per administrative employee	17,959	16,257	19,799	21,184	16,200
Payroll per sales employee	34,347	36,052	34,154	30,383	19,154
EXECUTIVE PAYROLL					
Payroll per executive - All executives	54,831	68,058	53,764	50,157	$ 39,143
Payroll per factory executive	35,529	36,882	43,619	39,334	25,366
Payroll per administrative executive	64,884	84,803	70,397	78,579	46,956
Payroll per sales executive	45,655	47,313	56,957	58,189	21,109
RECEIVABLES					
Collection period	57.6	58.8	57.2	55.9	54.2
PROFIT					
Gross profit percentage of sales	23.77%	28.79%	18.51%	23.19%	17.49%
Average gross profit per factory employee	$ 27,443	$ 36,748	$ 18,970	$ 23,787	$ 15,116
Income (loss) before taxes percentage of sales	3.22%	11.39%	5.04%	13.23%	3.66%
Average income (loss) before taxes per employee	$ 2,762	$ 9,851	$ 4,281	$ 11,263	$ 2,585

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 52,231	$ 56,506	$ 52,494	$ 62,630	$ 51,813	$ 60,341	$ 44,278
71,332	67,730	154,414	331,744	70,397	83,513	63,044
23,361	4,953	23,257	38,429	19,648	31,187	27,443
48,743	67,697	69,299	101,522	49,823	68,166	36,441
154.76%	72.24%	142.94%	270.15%	131.41%	167.66%	230.77%
73.69%	87.48%	70.58%	48.48%	77.16%	76.89%	75.33%
14.47	10.03	12.92	22.09	11.67	11.83	12.67
11.84	2.49	16.50	29.43	11.17	11.28	12.00
$ 88,320	$ 101,367	$ 45,673	$103,108	$ 86,199	$ 95,304	$ 81,441
120,455	116,473	314,204	717,289	112,245	125,308	110,383
89,030	60,242	166,963	376,174	68,538	78,445	66,503
842,134	2,055,143	1,019,477	511,002	993,396	1,000,755	422,353
93,981	112,916	107,018	116,267	93,277	103,602	99,395
121,725	128,622	321,550	719,719	117,053	130,923	121,014
89,399	55,438	171,318	377,909	71,623	92,037	72,929
515,550	2,724,456	1,251,321	762,778	983,482	1,096,074	347,365
318%	434%	378%	220%	332%	310%	275%
34.61%	28.57%	36.44%	38.86%	37.39%	36.09%	35.14%
67.27	85.40	75.10	31.71	81.15	53.85	91.76
$ 30,124	$ 29,300	$ 32,749	$ 37,950	$ 31,613	$ 33,950	$ 28,621
28,551	27,988	28,584	26,859	28,285	30,799	27,155
31,262	35,342	43,507	49,218	41,369	42,085	28,720
44,183	22,303	44,092	61,116	48,292	50,569	41,301
$ 25,790	$ 20,825	$ 24,847	$ 27,365	$ 23,423	$ 24,466	$ 23,585
25,608	20,663	24,218	24,226	21,842	23,160	22,673
15,039	21,477	20,695	19,881	20,026	19,231	17,812
39,678	14,419	35,579	52,793	39,456	40,751	36,335
48,366	42,406	60,790	84,939	70,325	62,348	40,689
30,010	35,870	32,478	17,094	29,346	34,465	31,055
48,071	66,254	79,200	108,649	77,188	80,168	62,129
18,170	30,000	58,339	43,055	48,292	62,956	56,227
~~60.3~~	46.7	51.0	60.4	72.1	68.8	56.1
34.45%	7.33%	24.13%	34.67%	24.55%	27.24%	22.43%
$ 42,104	$ 9,611	$ 127,318	$336,227	$ 28,781	$ 36,308	$ 27,934
13.91%	(0.67)%	7.01%	9.71%	6.08%	11.79%	4.83%
$ 12,366	$ (990)	$ 6,965	$ 9,528	$ 5,500	$ 11,034	$ 3,330

RETURN ON INVESTMENT - PER $100 OF SALES

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT					
Current Assets:					
Cash	$ 3.70	$ 6.51	$ 2.00	$ 4.56	$(1.28)
Receivables	15.34	15.56	15.07	14.88	14.19
Inventories	5.12	4.56	7.42	8.32	4.93
Marketable securities	0.86	1.48	1.32	3.74	0.36
Other current assets	1.21	1.68	2.36	2.70	1.18
	26.23	29.79	28.17	34.20	19.38
Plant Investment:					
Land and building	5.19	5.18	8.33	8.34	16.61
Machinery and equipment	34.97	37.04	43.65	39.99	38.05
Other fixed assets	4.13	3.48	2.97	1.37	3.17
	44.29	45.70	54.95	49.70	57.83
Non-Current Assets	2.19	1.67	2.40	5.77	1.19
TOTAL INVESTMENT	72.71	77.16	85.52	89.67	78.40
INVESTMENT TURNOVER PER $100 OF SALES	137.53%	129.60%	116.93%	111.52%	127.55%
EARNINGS					
Cost of Product	$76.23	$71.21	$81.49	$76.81	$82.51
Selling Expenses	8.90	8.17	4.76	4.16	4.08
Administrative Expenses	10.43	9.21	6.99	5.74	8.70
	95.56	88.59	93.24	86.71	95.29
Income (Loss) Before Interest, Other Income (Expense), and Taxes	4.44	11.41	6.76	13.29	4.71
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME (LOSS)	6.11%	14.79%	7.90%	14.82%	6.01%

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

FINANCIAL****	DIRECT MAIL-CATALOG**	DIRECTORY		LABEL		PACKAGING**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 1.52	$ 0.30	$10.10	$24.99	$ 1.89	$ 3.17	$ 1.08
15.79	12.22	13.08	15.36	19.59	18.76	15.31
4.60	12.99	5.96	4.60	9.55	10.74	18.16
0.26	0.00	0.71	2.12	0.26	0.51	0.00
15.85	1.84	1.60	1.86	0.89	0.90	2.01
38.02	27.35	31.45	48.93	32.18	34.08	36.56
3.57	9.89	13.09	9.90	7.23	13.76	11.03
32.39	43.49	29.11	32.57	32.25	37.76	20.18
2.97	0.43	2.90	2.24	3.38	1.71	1.37
38.93	53.81	45.10	44.71	42.86	53.23	32.58
1.03	0.00	2.17	1.08	5.62	1.87	0.00
77.98	81.16	78.72	94.72	80.66	89.18	69.14
128.24%	123.21%	127.03%	105.57%	123.98%	112.13%	144.63%
$65.55	$ 92.67	$75.87	$65.33	$75.45	$72.76	$77.57
7.95	1.48	7.20	11.52	8.18	7.41	7.64
11.99	6.10	9.69	15.34	9.34	7.83	7.94
85.49	100.25	92.76	92.19	92.97	88.00	93.15
14.51	(0.25)	7.24	7.81	7.03	12.00	6.85
18.61%	(0.31)%	9.20%	8.25%	8.72%	13.46%	9.91%

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL PRINTING FIRMS	826	$ 4,648,000	$ 7,873,000	$ 362,000
TOTAL - PROFIT LEADERS*	139	6,909,000	11,046,000	1,282,000
ALL PRINTERS BY PRODUCT SPECIALTY				
ALL FIRMS				
Commercial and Advertising	686	3,333,000	5,981,000	24,000
Magazine and Periodical	37	24,394,000	34,184,000	2,273,000
Newspaper	7	1,734,000	3,539,000	165,000
Financial	3	4,392,000	8,333,000	1,252,000
Direct Mail - Catalog	2	24,644,000	33,163,000	(1,324,000)
Directory	6	7,256,000	15,097,000	1,079,000
Label	20	5,892,000	8,947,000	475,000
Packaging	2	5,218,000	7,932,000	604,000
Book	34	5,607,000	10,074,000	529,000
Business Forms Manufacturers	18	6,580,000	12,713,000	725,000
No Predominant Product	11	8,577,000	14,726,000	(27,000)
PROFIT LEADERS				
Commercial and Advertising	98	4,013,000	6,772,000	775,000
Magazine and Periodical	11	35,233,000	52,259,000	6,300,000
Newspaper	1	3,368,000	4,212,000	454,000
Financial	3	4,392,000	8,333,000	1,252,000
Directory	2	5,840,000	9,411,000	876,000
Label	8	4,420,000	7,585,000	898,000
Packaging	1	9 405,000	13,176,000	1,190,000
Book	10	7,998,000	13,976,000	1,413,000
Business Forms Manufacturers	4	5,726,000	7,851,000	1,014,000
No Predominant Product	1	3,652,000	3,922,000	405,000

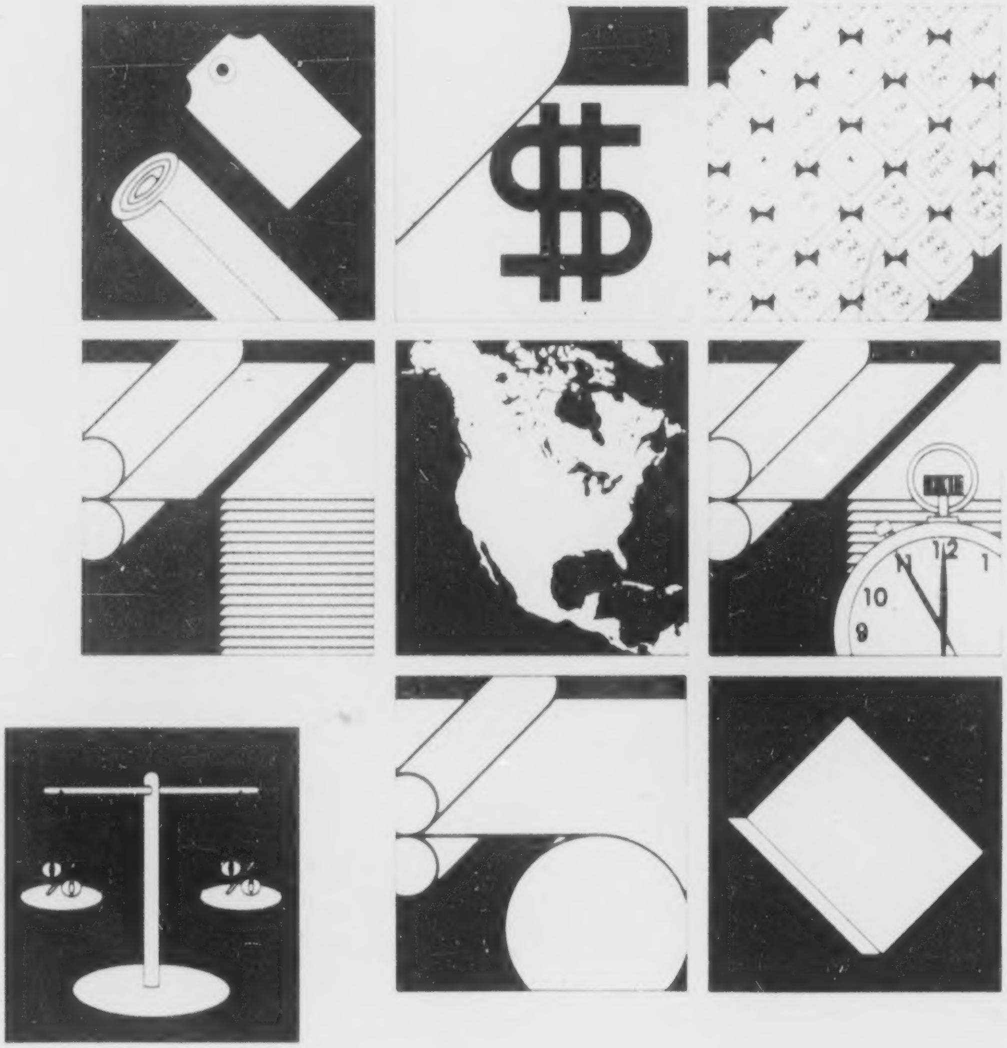
* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See page 3 for explanatory note.

A8740-1.4 U
10/87

PIA
1887-1987

1987 Financial Ratio Study



Volume IV

All Printers By Geographic Region

1987
FINANCIAL
RATIO STUDY

Volume IV: All Printers By Geographic Region

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

Offices:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 826 printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by geographic region - for example New England and Up-State New York, Metropolitan New York and New Jersey, etc. Readers can compare their firm's operations with other firms in the same geographic region in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

VALUE ADDED -- WHAT IT MEANS TO YOU.................................. 4- 5

ALL PRINTERS BY GEOGRAPHIC REGION.................................... 6-19
- New England and Up-State New York
- Metropolitan New York and New Jersey
- Eastern Penna., Maryland and D.C.
- Southeast Atlantic
- East North Central
- South Central
- Chicago Area
- West North Central
- Plains and Mountain States
- Pacific Southwest
- Pacific Northwest
- Canada

Report on Operations - Value Added = 100%........................... 6- 7
Supporting Schedules - Value Added = 100%........................... 8- 9
Report on Operations - Sales = 100%................................ 10-11
Supporting Schedules - Sales = 100%................................ 10-13
Balance Sheet.. 14-15
Significant Facts.. 16-17
Return on Investment - Per $100 of Sales........................... 18-19

ABSOLUTE DATA.. 20

REGIONAL GEOGRAPHIC BREAKDOWN

New England and Upstate New York
Upstate New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine

Metropolitan New York and New Jersey

Eastern Pennsylvania, Maryland and the District of Columbia

Southeast Atlantic
Virginia, West Virginia, Eastern Tennesee, North Carolina, South Carolina, Georgia and Florida

East North Central
Ohio, Michigan and Western Pennslyvania

South Central
Southern Indiana, Kentucky, Missouri, Southern Illinois, Arkansas, Western Tennessee, Alabama, Mississippi and Louisiana

Chicago Area
Northern Illinois, Northern Indiana, and Eastern Michigan

West North Central
Iowa, Nebraska, North Dakota, South Dakota, Minnesota, Wisconsin

Plains and Mountain States
Texas, Oklahoma, New Mexico, Northern Arizona, Northwestern Nevada, Wyoming, Western Idaho, Montana, Kansas, Utah, and Colorado

Pacific Southwest
Southwestern Nevada, Southern Arizona, and Southern California

Pacific Northwest
Northern California, Northeastern Nevada, Oregon, Eastern Idaho, Washington, Alaska and Hawaii

Canada

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

ALL PRINTERS BY GEOGRAPHIC REGION

REPORT ON OPERATIONS - VALUE ADDED = 100%

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	40.91	41.73	45.02
FACTORY EXPENSES	21.37	22.09	21.47
TOTAL FACTORY COST OF PRODUCT	62.28	63.82	66.49
GROSS PROFIT	37.72	36.18	33.51
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	16.45	20.04	13.62
Selling expenses	12.93	10.46	12.05
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	29.38	30.50	25.67
INCOME BEFORE INTEREST EXPENSE	8.34	5.68	7.84
Interest expense	2.82	2.98	2.93
OPERATING INCOME	5.52	2.70	4.91
Other income (expense)	0.48	(0.90)	0.83
INCOME BEFORE INCOME TAXES	6.00	1.80	5.74

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
41.71	42.99	42.52	40.80	41.80	40.93	40.08	41.02	43.82
22.28	19.30	21.26	21.32	20.89	23.38	21.72	21.14	18.43
63.99	62.29	63.78	62.12	62.69	64.31	61.80	62.16	62.25
36.01	37.71	36.22	37.88	37.31	35.69	38.20	37.84	37.75
15.91	15.33	15.51	14.06	16.96	17.05	17.13	18.07	13.05
13.20	13.63	13.99	15.10	12.76	14.49	15.32	12.81	13.40
29.11	28.96	29.50	29.16	29.72	31.54	32.45	30.88	26.45
6.90	8.75	6.72	8.72	7.59	4.15	5.75	6.96	11.30
3.25	3.12	3.06	2.91	3.43	3.29	3.22	3.15	3.27
3.65	5.63	3.66	5.81	4.16	0.86	2.53	3.81	8.03
0.93	0.90	1.65	0.80	1.29	1.88	1.63	0.85	1.79
4.58	6.53	5.31	6.61	5.45	2.74	4.16	4.66	9.82

ALL PRINTERS BY GEOGRAPHIC REGION

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
FACTORY PAYROLL			
Salaries - executive	3.54%	3.26%	3.31%
Direct wages	27.41	26.26	29.08
General factory salaries and wages	2.57	4.12	3.91
Packing, shipping and delivery wages	1.17	1.11	1.38
Payroll taxes	2.88	2.99	3.36
Employee benefits	3.34	3.99	3.98
TOTAL FACTORY PAYROLL	40.91	41.73	45.02
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.39	0.21	0.34
Depreciation - other	6.06	7.46	5.49
Taxes - real estate	0.28	0.13	0.31
Taxes - other	0.21	0.08	0.12
Insurance	1.31	1.28	0.99
Building rent	2.71	3.63	2.15
Utilities - heat, light, etc.	1.90	2.43	2.07
Equipment rental	0.93	0.03	1.12
Total Fixed Expenses	13.79	15.25	12.59
Other Expenses			
Factory supplies and expense	2.90	2.81	3.79
Packing, shipping and delivery expense	1.66	1.86	1.76
Repairs and maintenance	2.16	1.67	2.17
Other factory expenses	0.86	0.50	1.16
Total Other Expenses	7.58	6.84	8.88
TOTAL FACTORY EXPENSES	21.37	22.09	21.47
ADMINISTRATIVE EXPENSES			
Salaries - executive	5.62	7.96	3.56
Salaries - office	4.09	4.17	3.50
Payroll taxes	0.74	0.59	0.54
Employee benefits	0.89	1.22	0.93
Bad debts	0.36	0.20	0.47
Office supplies and expenses	0.80	0.70	0.65
Professional fees	0.98	1.45	0.98
Taxes - business	0.13	0.32	0.14
Telephone	0.85	0.82	0.81
Other administrative expenses	1.99	2.61	2.04
TOTAL ADMINISTRATIVE EXPENSES	16.45	20.04	13.62
SELLING EXPENSES			
Salaries - executive	1.53	1.67	2.02
Salaries and commissions - salesmen	5.99	4.13	4.88
Salaries - sales office clerical	1.08	0.50	1.11
Payroll taxes	0.57	0.37	0.51
Employee benefits	0.59	0.46	0.52
Advertising	0.51	1.07	0.52
Travel and entertainment	1.35	1.01	1.26
Other selling expenses	1.31	1.25	1.23
TOTAL SELLING EXPENSES	12.93	10.46	12.05

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
3.15%	2.87%	3.28%	2.34%	3.01%	3.58%	2.85%	2.06%	2.67%
28.78	28.31	27.11	26.17	28.79	28.30	27.96	29.00	31.45
2.75	3.26	3.55	3.44	2.31	2.35	2.03	2.05	3.76
1.43	0.91	1.40	1.58	1.20	1.55	1.52	0.98	1.23
2.91	3.35	3.00	3.17	3.12	2.72	2.79	3.25	1.11
2.69	4.29	4.18	4.10	3.37	2.43	2.93	3.68	3.60
41.71	42.99	42.52	40.80	41.80	40.93	40.08	41.02	43.82
0.35	0.36	0.43	0.42	0.43	0.25	0.19	0.39	0.39
6.55	5.56	5.72	5.47	5.33	6.30	5.84	5.29	5.31
0.29	0.29	0.26	0.58	0.39	0.31	0.15	0.25	0.55
0.49	0.53	0.45	0.09	0.16	0.47	0.45	0.31	0.11
1.01	0.78	0.92	0.94	1.03	1.26	1.48	0.93	0.41
2.17	1.48	2.00	1.94	1.88	3.13	3.49	3.78	1.71
2.09	1.96	2.04	2.30	1.93	1.92	1.73	1.16	1.47
1.13	0.87	1.29	0.66	1.13	2.17	0.97	1.94	0.22
14.08	11.83	13.11	12.40	12.28	15.81	14.30	14.05	10.17
3.24	3.68	3.27	3.08	3.23	2.56	2.99	2.31	2.63
1.40	0.95	1.82	2.14	2.09	1.56	1.39	1.46	1.80
2.48	2.02	2.06	2.61	2.34	2.49	2.28	2.21	2.51
1.08	0.82	1.00	1.09	0.95	0.96	0.76	1.11	1.32
8.20	7.47	8.15	8.92	8.61	7.57	7.42	7.09	8.26
22.28	19.30	21.26	21.32	20.89	23.38	21.72	21.14	18.43
4.09	4.66	4.46	3.99	5.57	5.68	4.81	5.13	3.00
4.55	3.10	3.58	3.36	3.77	4.22	4.28	4.40	3.43
0.60	0.67	0.64	0.50	0.68	0.73	0.62	0.71	0.19
0.84	1.08	1.23	0.83	1.13	0.80	0.72	0.93	0.42
0.74	0.62	0.53	0.43	0.77	0.86	1.06	0.99	1.02
0.69	0.65	0.68	0.65	0.69	0.77	0.82	0.91	0.83
0.94	0.93	0.90	1.04	0.91	0.87	1.22	0.99	0.90
0.24	0.57	0.22	0.24	0.14	0.28	0.18	0.50	0.29
0.81	0.74	0.74	0.69	0.60	0.64	0.81	0.73	0.59
2.41	2.31	2.53	2.33	2.70	2.20	2.61	2.78	2.38
15.91	15.33	15.51	14.06	16.96	17.05	17.13	18.07	13.05
1.60	2.28	1.98	2.30	1.91	2.23	1.78	1.79	1.44
6.40	6.15	6.72	6.58	5.86	7.11	7.40	6.53	6.46
1.30	1.11	1.09	1.27	1.16	1.02	1.21	1.10	1.21
0.57	0.63	0.61	0.63	0.58	0.54	0.58	0.60	0.17
0.53	0.66	0.65	0.63	0.58	0.44	0.53	0.51	0.50
0.70	0.61	0.67	0.65	0.55	0.69	0.82	0.85	0.88
0.94	1.23	1.39	1.38	1.20	1.20	1.16	0.90	1.41
1.16	0.96	0.88	1.66	0.92	1.26	1.84	0.53	1.33
13.20	13.63	13.99	15.10	12.76	14.49	15.32	12.81	13.40

ALL PRINTERS BY GEOGRAPHIC REGION

REPORT ON OPERATIONS - SALES = 100%

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	22.93	17.11	21.88
Other chargeable materials	4.78	7.17	5.09
Outside services	7.16	8.74	10.14
TOTAL MATERIALS	34.87	33.02	37.11
FACTORY PAYROLL	26.67	28.02	28.24
FACTORY EXPENSES	13.90	14.68	13.30
TOTAL FACTORY COST OF PRODUCT	75.44	75.72	78.65
GROSS PROFIT	24.56	24.28	21.35
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	10.79	13.37	8.49
Selling expenses	8.41	6.87	7.65
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	19.20	20.24	16.14
INCOME BEFORE INTEREST EXPENSE	5.36	4.04	5.21
Interest expense	1.82	1.95	1.83
OPERATING INCOME	3.54	2.09	3.38
Other income (expense)	0.35	(0.66)	0.50
INCOME BEFORE INCOME TAXES	3.89	1.43	3.88

SUPPORTING SCHEDULES - SALES = 100%

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
OTHER CHARGEABLE MATERIALS			
Ink	1.39%	1.78%	1.34%
Film	0.91	1.03	1.08
Plates	0.99	0.93	1.21
Other chargeable materials	1.49	3.43	1.46
TOTAL OTHER CHARGEABLE MATERIALS	4.78	7.17	5.09
OUTSIDE SERVICES			
Composition	0.64	0.86	0.75
Offset preparation	1.03	0.57	1.15
Printing	1.25	0.80	2.32
Binding	2.68	2.64	3.63
Other outside services	1.56	3.87	2.29
TOTAL OUTSIDE SERVICES	7.16	8.74	10.14

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
23.84	24.54	23.89	24.23	26.75	21.96	21.61	20.49	26.84
5.05	5.03	5.54	5.10	5.55	5.02	4.56	5.07	5.21
6.98	7.38	9.01	9.87	7.50	9.17	11.24	9.46	8.54
35.87	36.95	38.44	39.20	39.80	36.15	37.41	35.02	40.59
26.69	27.01	26.18	24.79	24.97	26.14	25.10	26.69	25.84
14.37	12.10	13.00	12.91	12.45	15.00	13.60	13.68	10.82
76.93	76.06	77.62	76.90	77.22	77.29	76.11	75.39	77.25
23.07	23.94	22.38	23.10	22.78	22.71	23.89	24.61	22.75
10.30	9.72	9.62	8.73	10.38	11.02	10.74	11.73	7.89
8.37	8.70	8.68	9.12	7.82	9.27	9.52	8.39	8.08
18.67	18.42	18.30	17.85	18.20	20.29	20.26	20.12	15.97
4.40	5.52	4.08	5.25	4.58	2.42	3.63	4.49	6.78
2.06	1.93	1.88	1.72	2.02	2.06	2.00	2.05	1.88
2.34	3.59	2.20	3.53	2.56	0.36	1.63	2.44	3.90
0.60	0.57	1.02	0.47	0.80	1.20	1.09	0.53	1.02
2.94	4.16	3.22	4.00	3.36	1.56	2.72	2.97	5.92

1.39%	1.50%	1.79%	1.95%	2.27%	1.51%	1.35%	1.28%	1.96%
1.33	1.05	0.98	0.99	0.94	1.11	1.24	1.24	0.98
1.19	1.19	1.19	0.94	1.02	1.14	0.99	1.23	1.00
1.14	1.29	1.58	1.22	1.32	1.26	0.98	1.32	1.27
5.05	5.03	5.54	5.10	5.55	5.02	4.56	5.07	5.21
0.70	0.29	0.85	0.69	0.91	1.18	0.78	0.56	1.04
1.06	1.71	1.75	1.40	1.35	0.82	1.70	0.73	1.64
1.85	0.83	2.10	1.77	1.99	3.07	3.62	3.75	2.30
1.00	2.21	2.43	3.14	0.99	2.12	2.94	2.81	1.50
2.37	2.34	1.88	2.87	2.26	1.98	2.20	1.61	2.06
6.98	7.38	9.01	9.87	7.50	9.17	11.24	9.46	8.54

ALL PRINTERS BY GEOGRAPHIC REGION

SUPPORTING SCHEDULES - SALES = 100%

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
FACTORY PAYROLL			
Salaries - executive	2.32%	2.04%	2.09%
Direct wages	17.86	17.75	18.14
General factory salaries and wages	1.68	2.79	2.52
Packing, shipping and delivery wages	0.75	0.72	0.86
Payroll taxes	1.87	2.02	2.15
Employee benefits	2.19	2.70	2.48
TOTAL FACTORY PAYROLL	26.67	28.02	28.24
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.26	0.16	0.21
Depreciation - other	3.93	4.95	3.46
Taxes - real estate	0.18	0.09	0.19
Taxes - other	0.14	0.06	0.07
Insurance	0.87	0.83	0.62
Building rent	1.76	2.41	1.35
Utilities - heat, light, etc.	1.24	1.62	1.26
Equipment rental	0.61	0.02	0.62
Total Fixed Expenses	8.99	10.14	7.78
Other Expenses			
Factory supplies and expense	1.89	1.89	2.38
Packing, shipping and delivery expense	1.06	1.24	1.11
Repairs and maintenance	1.40	1.10	1.34
Other factory expenses	0.56	0.31	0.69
Total Other Expenses	4.91	4.54	5.52
TOTAL FACTORY EXPENSES	13.90	14.68	13.30
ADMINISTRATIVE EXPENSES			
Salaries - executive	3.67	5.47	2.24
Salaries - office	2.71	2.73	2.14
Payroll taxes	0.48	0.40	0.33
Employee benefits	0.58	0.83	0.58
Bad debts	0.24	0.14	0.28
Office supplies and expenses	0.53	0.46	0.41
Professional fees	0.63	0.97	0.63
Taxes - business	0.09	0.19	0.09
Telephone	0.56	0.53	0.51
Other administrative expenses	1.30	1.65	1.28
TOTAL ADMINISTRATIVE EXPENSES	10.79	13.37	8.49
SELLING EXPENSES			
Salaries - executive	0.99	1.03	1.28
Salaries and commissions - salesmen	3.90	2.88	3.08
Salaries - sales office clerical	0.70	0.29	0.72
Payroll taxes	0.37	0.25	0.32
Employee benefits	0.39	0.30	0.33
Advertising	0.34	0.64	0.34
Travel and entertainment	0.88	0.65	0.81
Other selling expenses	0.84	0.83	0.77
TOTAL SELLING EXPENSES	8.41	6.87	7.65

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
2.01%	1.81%	2.04%	1.44%	1.80%	2.33%	1.77%	1.34%	1.56%
18.49	17.73	16.75	15.98	17.28	18.04	17.51	18.88	18.70
1.74	2.07	2.13	2.04	1.34	1.49	1.27	1.32	2.16
0.88	0.57	0.88	0.93	0.70	0.98	0.96	0.65	0.69
1.87	2.12	1.84	1.94	1.86	1.74	1.75	2.12	0.67
1.70	2.71	2.54	2.46	1.99	1.56	1.84	2.38	2.06
26.69	27.01	26.18	24.79	24.97	26.14	25.10	26.69	25.84
0.23	0.22	0.28	0.26	0.25	0.17	0.12	0.24	0.22
4.21	3.47	3.49	3.25	3.18	4.01	3.65	3.45	3.10
0.19	0.18	0.16	0.35	0.23	0.20	0.09	0.16	0.32
0.31	0.34	0.27	0.06	0.10	0.30	0.29	0.20	0.06
0.65	0.49	0.58	0.58	0.64	0.81	0.91	0.60	0.25
1.41	0.96	1.24	1.21	1.16	2.06	2.19	2.48	1.06
1.35	1.22	1.25	1.37	1.13	1.21	1.08	0.76	0.83
0.78	0.52	0.77	0.40	0.66	1.41	0.61	1.31	0.14
9.13	7.40	8.04	7.48	7.35	10.17	8.94	9.20	5.98
2.09	2.33	2.01	1.84	1.91	1.63	1.87	1.49	1.53
0.87	0.59	1.08	1.32	1.23	1.00	0.86	0.86	1.06
1.58	1.26	1.26	1.59	1.39	1.57	1.44	1.41	1.45
0.70	0.52	0.61	0.68	0.57	0.63	0.49	0.72	0.80
5.24	4.70	4.96	5.43	5.10	4.83	4.66	4.48	4.84
14.37	12.10	13.00	12.91	12.45	15.00	13.60	13.68	10.82
2.65	2.98	2.79	2.51	3.45	3.73	2.99	3.34	1.85
2.98	1.96	2.22	2.12	2.30	2.72	2.69	2.87	2.07
0.39	0.43	0.40	0.31	0.42	0.47	0.38	0.46	0.12
0.53	0.68	0.75	0.50	0.72	0.52	0.45	0.60	0.25
0.47	0.39	0.33	0.26	0.45	0.53	0.66	0.63	0.60
0.45	0.41	0.42	0.40	0.42	0.50	0.50	0.60	0.51
0.59	0.58	0.56	0.63	0.53	0.56	0.79	0.64	0.55
0.16	0.35	0.14	0.15	0.09	0.18	0.11	0.30	0.18
0.52	0.46	0.46	0.43	0.36	0.41	0.51	0.48	0.35
1.56	1.48	1.55	1.42	1.64	1.40	1.66	1.81	1.41
10.30	9.72	9.62	8.73	10.38	11.02	10.74	11.73	7.89
1.01	1.44	1.22	1.37	1.20	1.42	1.11	1.18	0.87
4.06	3.95	4.17	3.94	3.57	4.57	4.63	4.24	3.89
0.83	0.71	0.68	0.79	0.70	0.66	0.75	0.73	0.73
0.37	0.40	0.38	0.39	0.36	0.35	0.36	0.40	0.10
0.33	0.42	0.40	0.39	0.36	0.28	0.33	0.33	0.30
0.45	0.40	0.43	0.40	0.34	0.45	0.52	0.56	0.55
0.59	0.77	0.87	0.85	0.72	0.75	0.74	0.59	0.85
0.73	0.61	0.53	0.99	0.57	0.79	1.08	0.36	0.79
8.37	8.70	8.68	9.12	7.82	9.27	9.52	8.39	8.08

ALL PRINTERS BY GEOGRAPHIC REGION

BALANCE SHEET

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
ASSETS			
CURRENT ASSETS			
Cash	7.75%	12.05%	7.41%
Receivables	32.05	33.19	31.97
Inventories	10.01	12.18	12.11
Other current assets	5.56	4.31	3.39
TOTAL CURRENT ASSETS	55.37	61.73	54.88
FIXED ASSETS			
Real estate	9.91	6.01	10.09
Less: Accumulated depreciation	2.76	1.84	3.38
	7.15	4.17	6.71
Machinery and equipment	70.07	79.56	63.88
Less: Accumulated depreciation	40.20	52.99	32.71
	29.87	26.57	31.17
Other fixed assets	7.54	7.85	9.21
Less: Accumulated depreciation	4.21	3.88	4.50
	3.33	3.97	4.71
NET FIXED ASSETS	40.35	34.71	42.59
OTHER ASSETS	4.28	3.56	2.53
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	9.03	12.27	10.67
Accounts payable	13.51	16.99	14.17
Other current liabilities	7.23	8.87	7.79
TOTAL CURRENT LIABILITIES	29.77	38.13	32.63
LONG-TERM LIABILITIES	30.18	29.69	27.43
TOTAL LIABILITIES	59.95	67.82	60.06
SHAREHOLDERS' AND PROPRIETORS' EQUITY	40.05	32.18	39.94
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.86	1.62	1.68
QUICK RATIO	1.52	1.30	1.31
TOTAL LIABILITIES TO EQUITY	1.50	2.11	1.50
LONG-TERM LIABILITIES TO EQUITY	0.75	0.92	0.69
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.57	0.67	0.51

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
7.20%	6.34%	7.00%	5.16%	6.32%	7.99%	8.02%	7.12%	1.10%
30.53	32.57	31.85	33.99	29.11	33.69	34.91	31.89	34.33
11.73	11.41	12.18	12.92	15.28	10.84	7.97	11.38	12.73
2.45	3.32	3.76	2.17	3.74	3.93	5.04	5.01	3.52
51.91	53.64	54.79	54.24	54.45	56.45	55.94	55.40	51.68
10.72	13.54	12.95	9.08	10.20	7.76	3.01	7.57	12.01
2.95	4.60	4.33	3.26	3.67	2.79	1.15	1.36	3.06
7.77	8.94	8.62	5.82	6.53	4.97	1.86	6.21	8.95
72.76	66.39	66.97	67.75	66.94	72.98	72.52	73.27	66.30
39.65	37.68	38.34	36.23	36.45	42.24	39.53	43.51	32.61
33.11	28.71	28.63	31.52	30.49	30.74	32.99	29.76	33.69
8.80	6.94	7.76	7.98	7.74	9.60	11.94	9.01	5.49
5.03	3.43	4.63	4.47	4.27	5.65	6.50	5.10	2.83
3.77	3.51	3.13	3.51	3.47	3.95	5.44	3.91	2.66
44.65	41.16	40.38	40.85	40.49	39.66	40.29	39.88	45.30
3.44	5.20	4.83	4.91	5.06	3.89	3.77	4.72	3.02
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
9.17	8.73	10.28	9.16	8.09	12.29	9.84	9.77	8.20
12.07	14.53	15.15	14.21	13.67	12.24	13.57	13.87	18.85
7.71	9.73	8.08	9.19	10.62	5.69	8.28	8.68	8.45
28.95	32.99	33.51	32.56	32.38	30.22	31.69	32.32	35.50
34.88	30.50	29.05	33.20	32.95	30.33	29.48	29.05	22.79
63.83	63.49	62.56	65.76	65.33	60.55	61.17	61.37	58.29
36.17	36.51	37.44	34.24	34.67	39.45	38.83	38.63	41.71
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

1.79	1.63	1.64	1.67	1.68	1.87	1.77	1.71	1.46
1.39	1.28	1.27	1.27	1.21	1.51	1.51	1.36	1.10
1.76	1.74	1.67	1.92	1.88	1.53	1.58	1.59	1.40
0.96	0.84	0.78	0.97	0.95	0.77	0.76	0.75	0.55
0.54	0.57	0.57	0.53	0.54	0.58	0.55	0.59	0.49

ALL PRINTERS BY GEOGRAPHIC REGION

SIGNIFICANT FACTS

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
INVESTMENT			
Average assets per employee - All employees	$ 39,929	$ 55,703	$ 41,858
Average assets per factory employee (Excluding Executives)	57,800	78,420	57,380
Average net worth per employee - All employees	16,497	20,948	17,293
Average gross plant investment per factory employee (Excluding Executives)	48,910	71,596	48,863
Net worth percentage of fixed assets	163.00%	126.09%	98.69%
EMPLOYEES			
Percent factory - All employees	74.69%	75.41%	78.05%
Percent administrative - All employees	14.60	17.39	11.59
Percent sales - All employees	10.71	7.20	10.36
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 72,746	$ 93,757	$ 80,300
Sales per factory employee	98,334	127,307	105,288
Sales less material per factory employee	63,236	83,389	63,931
Sales per administrative employee	674,052	736,567	792,567
EXCLUDING EXECUTIVES			
Sales per employee - All employees	80,857	103,408	88,772
Sales per factory employee	104,503	131,867	111,346
Sales less material per factory employee	67,203	86,341	67,688
SALES PER SALESMAN	829,342	1,005,317	1,125,165
SALES TO CURRENT ASSETS	455%	318%	413%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	40.47%	42.20%	39.26%
Factory payroll percentage of gross plant investment	116.21	65.38	74.47
Payroll per employee - All employees	$ 28,755	$ 38,258	$ 30,298
Payroll per factory employee	25,492	32,767	27,650
Payroll per administrative employee	38,930	54,786	35,958
Payroll per sales employee	42,819	52,679	43,467
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 21,777	$ 26,861	$ 23,141
Payroll per factory employee	20,474	26,114	22,274
Payroll per administrative employee	18,301	21,960	18,827
Payroll per sales employee	34,373	38,888	32,222
EXECUTIVE PAYROLL			
Payroll per executive - All executives	58,633	106,723	57,358
Payroll per factory executive	38,380	25,252	41,631
Payroll per administrative executive	73,825	137,605	69,307
Payroll per sales executive	47,315	65,855	54,549
RECEIVABLES			
Collection period	58.8	63.8	58.4
PROFIT			
Gross profit percentage of sales	24.56%	24.28%	21.35%
Average gross profit per factory employee	$ 26,046	$ 33,069	$ 24,394
Income before taxes percentage of sales	3.89%	1.43%	3.88%
Average income before taxes per employee	$ 3,198	$ 1,321	$ 3,406

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
$ 33,077	$ 41,220	$ 41,779	$ 50,620	$ 43,853	$ 36,589	$ 37,180	$ 40,185	$ 43,055
46,015	57,952	59,109	81,097	60,447	54,027	56,690	59,925	60,701
12,060	15,521	16,737	17,581	15,592	14,945	13,767	16,389	18,125
40,850	48,180	51,119	60,519	49,770	47,072	48,739	50,799	49,853
96.91%	110.04%	127.70%	101.24%	100.06%	143.16%	144.79%	126.54%	138.33%
75.44%	76.31%	75.38%	73.47%	74.97%	71.35%	70.61%	70.48%	75.36%
13.50	11.84	12.89	12.68	13.73	15.46	15.66	15.85	12.08
11.06	11.85	11.73	13.85	11.30	13.19	13.73	13.67	12.56
$ 64,911	$ 77,170	$ 79,808	$ 100,746	$ 80,432	$ 74,691	$ 82,920	$ 81,124	$ 74,763
86,700	102,551	106,535	158,269	107,653	105,163	120,732	117,342	100,815
54,840	64,501	63,896	92,367	63,830	65,847	73,125	74,401	58,314
623,983	776,373	793,635	1,069,032	770,763	618,675	689,126	665,922	783,207
70,918	85,658	87,949	109,968	88,546	84,230	92,285	89,990	81,401
91,603	108,607	112,760	165,017	113,432	112,664	128,125	122,132	106,187
57,955	68,234	67,601	96,538	67,242	70,646	77,502	77,479	61,400
653,093	837,956	840,904	941,138	981,656	554,539	614,090	545,671	852,883
427%	407%	414%	564%	400%	471%	550%	465%	378%
39.83%	39.96%	39.19%	37.10%	38.05%	40.85%	38.81%	40.85%	36.03%
70.85	71.47	76.43	76.29	86.73	98.21	86.20	79.14	63.95
$ 25,235	$ 30,447	$ 30,334	$ 35,445	$ 29,694	$ 29,320	$ 31,202	$ 32,197	$ 25,484
22,408	27,252	26,826	32,118	26,372	26,463	28,706	29,602	24,847
32,370	39,393	37,983	40,874	39,225	34,973	32,646	38,182	23,973
39,674	32,818	48,541	54,319	41,735	41,678	42,539	40,042	34,485
$ 19,839	$ 22,558	$ 22,669	$ 26,834	$ 22,344	$ 23,221	$ 24,755	$ 24,641	$ 21,771
18,535	21,420	21,258	25,664	21,388	22,145	23,699	23,942	21,685
16,719	18,745	17,822	20,149	17,734	19,089	18,089	18,505	15,727
31,317	32,818	37,678	42,597	32,777	34,614	35,363	32,201	29,698
48,401	55,753	56,439	61,760	54,896	49,276	56,682	56,239	38,959
35,301	34,389	39,494	40,053	33,089	35,573	32,819	30,126	32,039
55,525	66,096	71,302	74,784	70,231	59,850	63,947	62,272	39,649
43,123	54,008	53,774	57,734	39,146	45,926	37,178	43,877	35,713
55.5	60.5	57.4	58.8	53.9	55.0	56.5	51.6	71.1
23.07%	23.94%	22.38%	23.10%	22.78%	22.71%	23.89%	24.61%	22.75%
$ 21,543	$ 26,401	$ 25,130	$ 44,130	$ 25,600	$ 25,754	$ 30,720	$ 30,855	$ 24,066
2.94%	4.16%	3.22%	4.00%	3.36%	1.56%	2.72%	2.97%	5.92%
$ 2,206	$ 3,261	$ 2,834	$ 4,486	$ 2,690	$ 1,651	$ 2,272	$ 2,841	$ 4,634

ALL PRINTERS BY GEOGRAPHIC REGION

RETURN ON INVESTMENT - PER $100 OF SALES

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
INVESTMENT			
Current Assets:			
Cash	$ 4.49	$ 7.09	$ 3.96
Receivables	15.82	17.08	15.73
Inventories	5.10	5.88	5.75
Marketable securities	2.55	1.09	0.73
Other current assets	1.26	1.42	1.39
	29.22	32.56	27.56
Plant Investment:			
Land and building	6.47	5.92	5.84
Machinery and equipment	36.81	44.33	33.66
Other fixed assets	4.00	4.50	5.14
	47.28	54.75	44.64
Non-Current Assets	2.37	2.29	1.35
TOTAL INVESTMENT	78.87	89.60	73.55
INVESTMENT TURNOVER PER $100 OF SALES	126.79%	111.61%	135.96%
EARNINGS			
Cost of Product	$75.44	$75.72	$78.65
Selling Expenses	8.41	6.87	7.65
Administrative Expenses	10.79	13.37	8.49
	94.64	95.96	94.79
Income Before Interest, Other Income (Expense), and Taxes	5.36	4.04	5.21
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.80%	4.51%	7.08%

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
$ 3.60	$ 3.25	$ 3.88	$ 2.47	$ 3.09	$ 4.08	$ 3.50	$ 3.81	$ 0.96
14.79	16.07	15.34	15.64	14.38	14.63	14.75	13.73	18.68
5.62	5.74	5.86	6.05	7.50	5.08	3.47	5.33	7.43
0.49	0.50	0.84	0.36	0.47	0.55	0.26	0.51	1.01
0.88	1.17	1.17	0.77	1.61	1.57	2.64	1.85	1.27
25.38	26.73	27.09	25.29	27.05	25.91	24.62	25.23	29.35
6.21	7.55	7.18	5.06	6.07	4.55	1.65	5.21	8.07
36.23	33.28	34.66	32.16	34.98	35.01	32.52	33.25	38.34
3.91	3.19	3.98	3.55	3.57	4.23	5.00	3.82	3.05
46.35	44.02	45.82	40.77	44.62	43.79	39.17	42.28	49.46
1.87	2.70	2.76	2.95	3.42	2.03	1.73	2.33	1.77
73.60	73.45	75.67	69.01	75.09	71.73	65.52	69.84	80.58
135.87%	136.15%	132.15%	144.91%	133.17%	139.41%	152.63%	143.18%	124.10%
$76.93	$76.06	$77.62	$76.90	$77.22	$77.29	$76.11	$75.39	$77.25
8.37	8.70	8.68	9.12	7.82	9.27	9.52	8.39	8.08
10.30	9.72	9.62	8.73	10.38	11.02	10.74	11.73	7.89
95.60	94.48	95.92	94.75	95.42	97.58	96.37	95.51	93.22
4.40	5.52	4.08	5.25	4.58	2.42	3.63	4.49	6.78
5.98%	7.52%	5.39%	7.61%	6.10%	3.37%	5.54%	6.43%	8.41%

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL PRINTING FIRMS	826	$4,648,000	$ 7,873,000	$362,000
ALL PRINTERS BY GEOGRAPHIC REGION				
New England and Up-State New York	102	3,299,000	5,802,000	295,000
Metropolitan New York and New Jersey	13	4,325,000	7,746,000	41,000
Eastern Penna., Maryland and D.C.	55	4,884,000	8,546,000	561,000
Southeast Atlantic	89	4,938,000	8,253,000	409,000
East North Central	44	4,436,000	7,842,000	386,000
South Central	77	4,063,000	7,416,000	319,000
Chicago Area	59	7,083,000	12,543,000	537,000
West North Central	77	8,473,000	11,335,000	381,000
Plains and Mountain States	95	2,821,000	4,995,000	142,000
Pacific Southwest	72	4,450,000	7,996,000	492,000
Pacific Northwest	63	2,573,000	4,823,000	152,000
Canada	80	5,120,000	9,036,000	501,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

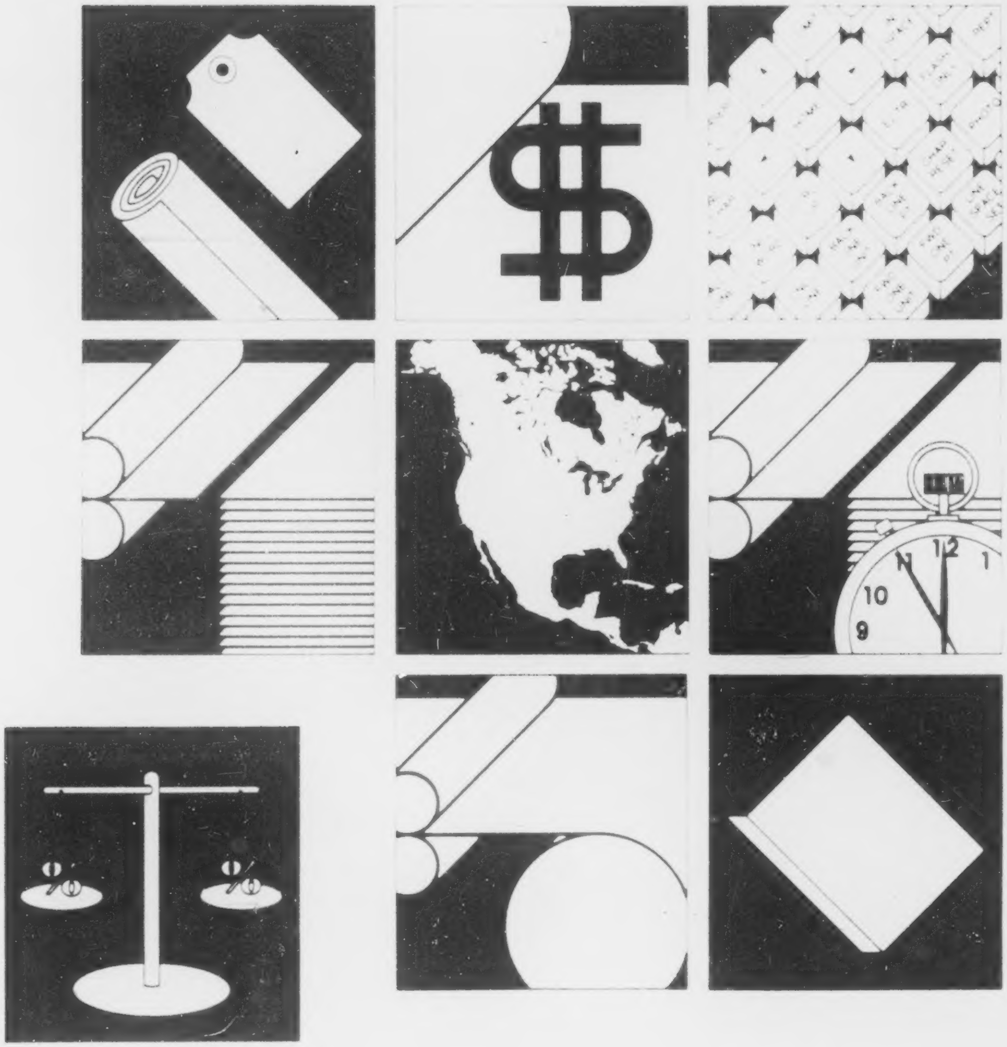
			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratios Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

** Unlike the ratios shown in this book, these figures are arithmetic averages.

A8740-1.5 U
10/87

CELEBRATING 100 YEARS OF SERVICE
PIA
INC
1887–1987
CELEBRATION OF PRINT

1987 Financial Ratio Study



Volume V

Sheetfed Printers By Size and Geographic Area

1987
FINANCIAL
RATIO STUDY

Volume V: Sheetfed Printers By Size and Geographic Area

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.
1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

Dear Colleague:

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 608 sheet-fed printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales to $250,000, sales from $250,000 to $500,000, etc.; and by geographic region - for example, New England and Up-State New York, Metropolitan New York and New Jersey, etc. Readers can compare their firm's operations with other firms having the same sales volume and/or located in the same geographic region in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return On Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

VALUE ADDED -- WHAT IT MEANS TO YOU.. 4- 5

CHAPTER 1 - BY SIZE OF FIRM.. 6-19
    Report on Operations - Value Added = 100%.. 6- 7
    Supporting Schedules - Value Added = 100%.. 8- 9
    Report on Operations - Sales = 100%.. 10-11
    Supporting Schedules - Sales = 100%.. 10-13
    Balance Sheet.. 14-15
    Significant Facts.. 16-17
    Return on Investment - Per $100 of Sales.. 18-19
CHAPTER 2 - BY GEOGRAPHIC REGIONS.. 20-41
    Report on Operations - Value Added = 100%.. 20-21
    Supporting Schedules - Value Added = 100%.. 22-23
    Report on Operations - Value Added = 100%.. 24-25
    Supporting Schedules - Value Added = 100%.. 26-27
    Report on Operations - Sales = 100%.. 28-29
    Supporting Schedules - Sales = 100%.. 28-31
    Report on Operations - Sales = 100%.. 32-33
    Supporting Schedules - Sales = 100%.. 32-35
    Balance Sheet.. 36-37
    Significant Facts.. 38-39
    Return on Investment - Per $100 of Sales.. 40-41

ABSOLUTE DATA.. 42-43

REGIONAL GEOGRAPHIC BREAKDOWN

New England and Upstate New York
Upstate New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine

Metropolitan New York and New Jersey

Eastern Pennsylvania, Maryland and the District of Columbia

Southeast Atlantic
Virginia, West Virginia, Eastern Tennesee, North Carolina, South Carolina, Georgia and Florida

East North Central
Ohio, Michigan and Western Pennslyvania

South Central
Southern Indiana, Kentucky, Missouri, Southern Illinois, Arkansas, Western Tennessee, Alabama, Mississippi and Louisiana

Chicago Area
Northern Illinois, Northern Indiana, and Eastern Michigan

West North Central
Iowa, Nebraska, North Dakota, South Dakota, Minnesota, Wisconsin

Plains and Mountain States
Texas, Oklahoma, New Mexico, Northern Arizona, Northwestern Nevada, Wyoming, Western Idaho, Montana, Kansas, Utah, and Colorado

Pacific Southwest
Southwestern Nevada, Southern Arizona, and Southern California

Pacific Northwest
Northern California, Northeastern Nevada, Oregon, Eastern Idaho, Washington, Alaska and Hawaii

Canada

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	41.37	36.69	36.19	31.34	38.23	33.63
FACTORY EXPENSES	20.82	18.61	29.45	31.17	26.80	29.76
TOTAL FACTORY COST OF PRODUCT	62.19	55.30	65.64	62.51	65.03	63.39
GROSS PROFIT	37.81	44.70	34.36	37.49	34.97	36.61
ADMINISTRATIVE AND SELLING EXPENSES						
Administrative expenses	16.81	14.56	15.99	11.08	22.27	16.12
Selling expenses	14.12	12.38	7.35	5.71	8.67	6.73
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	30.93	26.94	23.34	16.79	30.94	22.85
INCOME BEFORE INTEREST EXPENSE	6.88	17.76	11.02	20.70	4.03	13.76
Interest expense	2.99	1.91	2.56	1.61	2.34	1.23
OPERATING INCOME	3.89	15.85	8.46	19.09	1.69	12.53
Other income (expense)	1.10	1.85	0.61	(0.03)	1.01	0.56
INCOME BEFORE INCOME TAXES	4.99	17.70	9.07	19.06	2.70	13.09

* See page 10 for the definition of "Profit Leaders".

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
40.04	37.00	41.44	35.92	42.71	35.42	45.64	41.29
22.23	19.48	19.98	17.54	19.24	16.59	18.36	16.26
62.27	56.48	61.42	53.46	61.95	52.01	64.00	57.55
37.73	43.52	38.58	46.54	38.05	47.99	36.00	42.45
20.26	16.50	16.38	15.84	13.77	13.74	10.82	10.63
11.97	10.48	15.62	13.40	15.63	14.34	14.86	13.74
32.23	26.98	32.00	29.24	29.40	28.08	25.68	24.37
5.50	16.54	6.58	17.30	8.65	19.91	10.32	18.08
2.82	2.14	3.26	2.31	3.13	1.27	2.35	1.66
2.68	14.40	3.32	14.99	5.52	18.64	7.97	16.42
1.13	3.42	1.23	2.00	0.97	0.67	0.80	1.34
3.81	17.82	4.55	16.99	6.49	19.31	8.77	17.76

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL						
Salaries - executive	3.02%	2.63%	2.16%	0.00%	2.48%	4.22%
Direct wages	28.50	25.10	26.31	24.59	28.52	25.63
General factory salaries and wages	2.52	2.45	0.90	0.08	2.09	0.51
Packing, shipping and delivery wages	1.24	1.12	0.33	0.75	0.26	0.21
Payroll taxes	2.88	2.34	4.53	4.99	3.24	2.39
Employee benefits	3.21	3.05	1.96	0.93	1.64	0.67
TOTAL FACTORY PAYROLL	41.37	36.69	36.19	31.34	38.23	33.63
FACTORY EXPENSES						
Fixed Expenses						
Depreciation - real estate	0.33	0.33	0.00	0.00	0.26	0.00
Depreciation - other	5.79	5.73	9.51	10.77	6.32	5.36
Taxes - real estate	0.31	0.37	0.33	0.73	0.18	0.00
Taxes - other	0.31	0.27	0.22	0.37	0.27	0.19
Insurance	1.14	0.89	2.00	1.99	2.00	2.16
Building rent	2.69	2.14	7.14	5.90	5.77	5.20
Utilities - heat, light, etc.	1.72	1.47	2.55	3.34	1.96	2.20
Equipment rental	1.08	0.64	0.69	1.33	1.93	4.11
Total Fixed Expenses	13.37	11.84	22.44	24.43	18.69	19.22
Other Expenses						
Factory supplies and expense	2.83	2.55	1.64	1.81	3.06	5.60
Packing, shipping and delivery expense	1.55	1.43	1.00	1.69	2.20	1.72
Repairs and maintenance	2.18	2.03	3.09	3.24	2.41	2.51
Other factory expenses	0.89	0.76	1.28	0.00	0.44	0.71
Total Other Expenses	7.45	6.77	7.01	6.74	8.11	10.54
TOTAL FACTORY EXPENSES	20.82	18.61	29.45	31.17	26.80	29.76
ADMINISTRATIVE EXPENSES						
Salaries - executive	5.13	5.15	5.58	2.88	8.62	5.34
Salaries - office	4.20	3.12	3.25	1.91	5.31	2.52
Payroll taxes	0.66	0.45	0.70	0.42	1.03	0.60
Employee benefits	0.91	0.65	0.20	0.00	0.97	0.36
Bad debts	0.69	0.63	0.20	0.10	0.42	1.95
Office supplies and expenses	0.79	0.75	0.80	1.04	0.98	1.10
Professional fees	1.01	0.90	1.39	1.52	1.07	1.40
Taxes - business	0.29	0.28	0.11	0.08	0.66	0.28
Telephone	0.77	0.55	1.07	1.11	1.09	0.86
Other administrative expenses	2.36	2.08	2.69	2.02	2.12	1.71
TOTAL ADMINISTRATIVE EXPENSES	16.81	14.56	15.99	11.08	22.27	16.12
SELLING EXPENSES						
Salaries - executive	2.00	1.60	0.78	0.00	1.97	2.90
Salaries and commissions - salesmen	6.64	6.07	2.05	2.12	3.27	0.00
Salaries - sales office clerical	1.15	0.83	0.00	0.00	0.30	0.00
Payroll taxes	0.57	0.41	0.41	0.57	0.33	0.23
Employee benefits	0.56	0.52	0.12	0.10	0.21	0.42
Advertising	0.72	0.60	0.94	1.72	1.15	1.24
Travel and entertainment	1.26	1.22	0.92	0.26	1.11	1.19
Other selling expenses	1.22	1.13	2.13	0.94	0.33	0.75
TOTAL SELLING EXPENSES	14.12	12.38	7.35	5.71	8.67	6.73

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
3.02%	2.18%	3.16%	2.55%	2.88%	3.00%	3.19%	3.42%
28.48	26.69	28.98	25.74	27.94	23.19	27.69	23.61
2.22	3.12	2.00	1.60	3.49	1.99	4.77	4.76
1.03	0.93	1.43	1.12	1.29	1.11	1.60	1.68
2.75	1.93	2.85	2.30	2.82	2.17	3.04	2.51
2.54	2.15	3.02	2.61	4.29	3.96	5.35	5.31
40.04	37.00	41.44	35.92	42.71	35.42	45.64	41.29
0.34	0.35	0.31	0.28	0.33	0.34	0.53	0.55
6.30	6.72	5.75	5.62	5.39	5.18	4.18	3.84
0.29	0.41	0.33	0.39	0.30	0.30	0.37	0.31
0.33	0.35	0.30	0.26	0.33	0.23	0.26	0.24
1.57	1.39	1.01	0.68	0.77	0.60	0.47	0.36
3.51	2.44	2.27	2.21	1.75	1.34	1.38	0.85
1.65	1.27	1.65	1.22	1.74	1.41	1.93	1.71
1.67	1.06	0.91	0.36	0.65	0.10	0.43	0.35
15.66	13.99	12.53	11.02	11.26	9.50	9.55	8.21
2.20	1.58	2.91	2.34	3.29	2.82	3.57	3.67
1.42	1.63	1.50	1.08	1.60	1.34	1.75	1.86
2.31	1.98	2.08	2.20	2.00	1.80	2.37	1.59
0.64	0.30	0.96	0.90	1.09	1.13	1.12	0.93
6.57	5.49	7.45	6.52	7.98	7.09	8.81	8.05
22.23	19.48	19.98	17.54	19.24	16.59	18.36	16.26
6.57	6.97	4.77	5.17	3.95	5.20	2.36	3.02
5.33	3.72	4.12	3.69	3.05	2.43	2.89	2.29
0.87	0.46	0.64	0.52	0.43	0.41	0.36	0.30
1.02	0.55	0.82	0.60	1.09	0.75	0.75	0.98
0.62	0.54	0.82	0.63	0.72	0.82	0.45	0.43
0.93	1.04	0.79	0.76	0.61	0.48	0.60	0.42
1.02	0.97	1.06	0.86	0.93	0.82	0.70	0.73
0.35	0.30	0.29	0.35	0.14	0.31	0.16	0.14
0.96	0.64	0.68	0.46	0.68	0.51	0.53	0.43
2.59	1.31	2.39	2.80	2.17	2.01	2.02	1.89
20.26	16.50	16.38	15.84	13.77	13.74	10.82	10.63
2.06	1.69	2.15	1.57	1.95	2.13	1.33	1.10
5.10	4.21	7.59	7.51	7.72	7.87	7.43	6.02
0.89	0.[illegible]	1.22	0.54	[illegible]	1.11	1.65	1.96
0.53	0.26	0.63	0.44	0.58	0.47	0.59	0.51
0.42	0.27	0.59	0.49	0.77	0.90	0.68	0.67
0.76	0.81	0.71	0.51	0.69	0.32	0.46	0.37
1.26	1.48	1.33	1.39	1.24	0.81	1.11	1.21
0.96	1.24	1.40	0.95	1.17	0.73	1.61	1.90
11.97	10.48	15.62	13.40	15.63	14.34	14.86	13.74

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT						
MATERIALS						
Paper	21.28	20.27	19.40	20.75	19.58	19.11
Other chargeable materials	4.90	4.59	7.25	3.35	3.60	2.71
Outside services	9.30	9.22	7.86	8.90	8.41	10.08
TOTAL MATERIALS	35.48	34.08	34.51	33.00	31.59	31.90
FACTORY PAYROLL	26.67	24.21	23.84	21.14	26.22	22.93
FACTORY EXPENSES	13.45	12.34	19.56	21.30	18.38	20.18
TOTAL FACTORY COST OF PRODUCT	75.60	70.63	77.91	75.44	76.19	75.01
GROSS PROFIT	24.40	29.37	22.09	24.56	23.81	24.99
ADMINISTRATIVE AND SELLING EXPENSES						
Administrative expenses	10.89	9.66	10.15	7.32	15.30	11.08
Selling expenses	9.08	8.09	4.71	3.68	5.87	4.55
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	19.97	17.75	14.86	11.00	21.17	15.63
INCOME BEFORE INTEREST EXPENSE	4.43	11.62	7.23	13.56	2.64	9.36
Interest expense	1.92	1.25	1.67	1.01	1.60	0.85
OPERATING INCOME	2.51	10.37	5.56	12.55	1.04	8.51
Other income (expense)	0.72	1.18	0.38	(0.02)	0.73	0.39
INCOME BEFORE INCOME TAXES	3.23	11.55	5.94	12.53	1.77	8.90

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS						
Ink	1.27%	1.17%	0.45%	0.70%	0.82%	0.79%
Film	1.17	1.10	0.58	1.00	0.82	0.81
Plates	1.16	1.03	0.61	0.94	1.09	1.10
Other chargeable materials	1.30	1.29	5.61	0.71	0.87	0.01
TOTAL OTHER CHARGEABLE MATERIALS	4.90	4.59	7.25	3.35	3.60	2.71
OUTSIDE SERVICES						
Composition	0.88	1.45	1.43	2.59	1.43	1.41
Offset preparation	1.42	1.33	0.31	0.51	0.36	0.00
Printing	2.40	2.22	4.21	4.63	3.36	2.78
Binding	2.38	2.04	1.15	1.17	1.20	2.68
Other outside services	2.22	2.18	0.76	0.00	2.06	3.21
TOTAL OUTSIDE SERVICES	9.30	9.22	7.86	8.90	8.41	10.08

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
20.42	19.38	21.27	20.56	22.66	20.81	22.54	20.46
4.61	5.03	4.85	4.15	5.10	4.36	6.24	5.85
9.26	10.21	9.71	8.83	9.35	10.48	8.00	7.04
34.29	34.62	35.83	33.54	37.11	35.65	36.78	33.35
26.30	24.43	26.62	23.81	26.87	22.93	28.58	27.23
14.62	12.72	12.84	11.75	12.06	10.78	11.40	10.79
75.21	71.77	75.29	69.10	76.04	69.36	76.76	71.37
24.79	28.23	24.71	30.90	23.96	30.64	23.24	28.63
13.30	10.86	10.53	10.64	8.67	8.82	6.91	7.17
7.84	6.65	10.00	8.85	9.79	9.09	9.68	9.40
21.14	17.51	20.53	19.49	18.46	17.91	16.59	16.57
3.65	10.72	4.18	11.41	5.50	12.73	6.65	12.06
1.85	1.36	2.08	1.53	1.93	0.81	1.48	1.12
1.80	9.36	2.10	9.88	3.57	11.92	5.17	10.94
0.76	2.18	0.81	1.27	0.56	0.42	0.47	0.83
2.56	11.54	2.91	11.15	4.13	12.34	5.64	11.77

0.97%	0.95%	1.33%	1.16%	1.50%	1.24%	1.72%	1.55%
1.10	1.34	1.21	1.02	1.24	0.90	1.36	1.31
1.08	1.31	1.23	0.96	1.24	0.84	1.06	1.07
1.46	1.43	1.08	1.01	1.12	1.38	2.10	1.92
4.61	5.03	4.85	4.15	5.10	4.36	6.24	5.85
0.87	1.57	0.96	1.13	0.68	1.59	0.60	1.28
0.95	1.72	1.84	1.98	1.73	1.03	0.65	0.39
3.57	2.91	2.01	2.23	1.52	2.31	2.07	0.47
1.58	1.71	2.60	1.19	3.31	3.63	2.32	2.25
2.29	2.30	2.30	2.30	2.11	1.92	2.36	2.65
9.26	10.21	9.71	8.83	9.35	10.48	8.00	7.04

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL						
Salaries - executive	1.95%	1.74%	1.45%	0.00%	1.63%	2.88%
Direct wages	18.39	16.59	17.31	16.74	19.64	17.44
General factory salaries and wages	1.62	1.61	0.61	0.05	1.38	0.36
Packing, shipping and delivery wages	0.79	0.71	0.20	0.46	0.18	0.15
Payroll taxes	1.86	1.55	2.98	3.32	2.26	1.63
Employee benefits	2.06	2.01	1.29	0.57	1.13	0.47
TOTAL FACTORY PAYROLL	26.67	24.21	23.84	21.14	26.22	22.93
FACTORY EXPENSES						
Fixed Expenses						
Depreciation - real estate	0.22	0.22	0.00	0.00	0.17	0.00
Depreciation - other	3.73	3.78	6.31	7.47	4.38	3.64
Taxes - real estate	0.20	0.25	0.20	0.46	0.12	0.00
Taxes - other	0.20	0.18	0.16	0.28	0.19	0.13
Insurance	0.74	0.59	1.31	1.35	1.35	1.46
Building rent	1.75	1.42	4.68	3.89	3.95	3.57
Utilities - heat, light, etc.	1.11	0.98	1.75	2.35	1.34	1.49
Equipment rental	0.71	0.45	0.54	1.07	1.33	2.84
Total Fixed Expenses	8.66	7.87	14.95	16.87	12.83	13.13
Other Expenses						
Factory supplies and expense	1.83	1.68	1.10	1.17	2.11	3.73
Packing, shipping and delivery expense	0.98	0.93	0.63	1.05	1.49	1.15
Repairs and maintenance	1.40	1.36	2.06	2.21	1.64	1.68
Other factory expenses	0.58	0.50	0.82	0.00	0.31	0.49
Total Other Expenses	4.79	4.47	4.61	4.43	5.55	7.05
TOTAL FACTORY EXPENSES	13.45	12.34	19.56	21.30	18.38	20.18
ADMINISTRATIVE EXPENSES						
Salaries - executive	3.34	3.45	3.33	1.77	6.00	3.69
Salaries - office	2.72	2.05	2.08	1.18	3.61	1.72
Payroll taxes	0.43	0.30	0.43	0.26	0.71	0.41
Employee benefits	0.59	0.43	0.11	0.00	0.67	0.25
Bad debts	0.44	0.41	0.14	0.07	0.29	1.32
Office supplies and expenses	0.51	0.49	0.53	0.71	0.67	0.74
Professional fees	0.65	0.60	0.91	0.99	0.73	0.97
Taxes - business	0.18	0.18	0.07	0.05	0.39	0.19
Telephone	0.50	0.36	0.69	0.69	0.76	0.60
Other administrative expenses	1.53	1.39	1.86	1.60	1.47	1.19
TOTAL ADMINISTRATIVE EXPENSES	10.89	9.66	10.15	7.32	15.30	11.08
SELLING EXPENSES						
Salaries - executive	1.28	1.04	0.56	0.00	1.32	1.96
Salaries and commissions - salesmen	4.27	3.94	1.36	1.37	2.19	0.00
Salaries - sales office clerical	0.75	0.56	0.00	0.00	0.20	0.00
Payroll taxes	0.37	0.28	0.28	0.37	0.23	0.15
Employee benefits	0.36	0.34	0.08	0.07	0.15	0.29
Advertising	0.47	0.40	0.62	1.13	0.81	0.83
Travel and entertainment	0.81	0.80	0.64	0.17	0.75	0.80
Other selling expenses	0.77	0.73	1.17	0.57	0.22	0.52
TOTAL SELLING EXPENSES	9.08	8.09	4.71	3.68	5.87	4.55

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.97%	1.40%	2.03%	1.69%	1.81%	1.94%	2.05%	2.35%
18.73	17.78	18.61	17.06	17.54	15.02	17.28	15.45
1.45	1.98	1.29	1.09	2.23	1.30	3.03	3.15
0.66	0.58	0.92	0.70	0.81	0.71	0.99	1.10
1.81	1.28	1.83	1.53	1.78	1.41	1.91	1.67
1.68	1.41	1.94	1.74	2.70	2.55	3.32	3.51
26.30	24.43	26.62	23.81	26.87	22.93	28.58	27.23
0.22	0.22	0.20	0.20	0.21	0.21	0.35	0.37
4.14	4.33	3.67	3.72	3.34	3.38	2.64	2.59
0.19	0.28	0.22	0.27	0.19	0.19	0.23	0.20
0.22	0.22	0.19	0.18	0.20	0.14	0.16	0.15
1.01	0.91	0.65	0.47	0.49	0.40	0.29	0.24
2.32	1.63	1.46	1.48	1.10	0.85	0.84	0.55
1.07	0.82	1.06	0.82	1.09	0.92	1.21	1.13
1.14	0.76	0.59	0.24	0.41	0.06	0.28	0.24
10.31	9.17	8.04	7.38	7.03	6.15	6.00	5.47
1.46	0.99	1.87	1.56	2.07	1.86	2.27	2.47
0.92	1.05	0.96	0.72	1.01	0.87	0.98	1.17
1.50	1.31	1.34	1.48	1.25	1.16	1.47	1.07
0.43	0.20	0.63	0.61	0.70	0.74	0.68	0.61
4.31	3.55	4.80	4.37	5.03	4.63	5.40	5.32
14.62	12.72	12.84	11.75	12.06	10.78	11.40	10.79
4.32	4.71	3.07	3.54	2.52	3.30	1.52	1.99
3.52	2.41	2.64	2.44	1.90	1.58	1.84	1.58
0.56	0.30	0.41	0.35	0.27	0.26	0.23	0.20
0.67	0.36	0.54	0.42	0.67	0.49	0.48	0.65
0.40	0.33	0.52	0.41	0.45	0.53	0.29	0.29
0.62	0.69	0.51	0.51	0.38	0.31	0.38	0.28
0.66	0.62	0.69	0.57	0.58	0.52	0.46	0.52
0.23	0.19	0.18	0.24	0.09	0.20	0.10	0.09
0.62	0.41	0.44	0.31	0.43	0.32	0.35	0.31
1.70	0.84	1.53	1.85	1.38	1.31	1.26	1.26
13.30	10.86	10.53	10.64	8.67	8.82	6.91	7.17
1.31	0.99	1.38	1.04	1.22	1.39	0.86	0.79
3.38	2.81	4.85	4.92	4.85	4.94	4.82	3.96
0.59	0.34	0.79	0.37	0.94	0.69	1.08	1.40
0.35	0.16	0.41	0.30	0.36	0.30	0.39	0.36
0.28	0.17	0.38	0.33	0.48	0.57	0.44	0.46
0.49	0.52	0.46	0.34	0.44	0.21	0.30	0.26
0.83	0.94	0.85	0.92	0.77	0.51	0.73	0.86
0.61	0.72	0.88	0.63	0.73	0.48	1.06	1.31
7.84	6.65	10.00	8.85	9.79	9.09	9.68	9.40

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS						
CURRENT ASSETS						
Cash	7.55%	11.42%	5.47%	4.95%	11.60%	7.63%
Receivables	33.10	30.62	16.23	20.51	28.08	40.74
Inventories	10.48	9.28	7.71	7.71	8.12	2.95
Other current assets	3.86	5.70	1.70	0.26	4.52	6.73
TOTAL CURRENT ASSETS	54.99	57.02	31.11	33.43	52.32	58.05
FIXED ASSETS						
Real estate	9.12	9.50	2.03	4.57	5.01	0.00
Less: Accumulated depreciation	2.83	3.06	2.03	4.57	2.48	0.00
	6.29	6.44	0.00	0.00	2.53	0.00
Machinery and equipment	70.85	68.12	114.83	112.23	86.78	79.60
Less: Accumulated depreciation	40.33	37.50	60.05	57.66	50.43	44.79
	30.52	30.62	54.78	54.57	36.35	34.81
Other fixed assets	9.30	7.09	18.46	22.94	9.19	9.28
Less: Accumulated depreciation	5.17	3.56	8.54	11.00	4.97	5.79
	4.13	3.53	9.92	11.94	4.22	3.49
NET FIXED ASSETS	40.94	40.59	64.70	66.51	43.10	38.30
OTHER ASSETS	4.07	2.39	4.19	0.06	4.58	3.65
TOTAL ASSETS	100.00	100.00	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY						
CURRENT LIABILITIES						
Notes payable	9.50	5.85	12.73	12.31	10.32	26.95
Accounts payable	13.81	10.56	11.19	11.73	12.76	13.68
Other current liabilities	8.10	8.75	6.36	7.19	3.78	5.43
TOTAL CURRENT LIABILITIES	31.41	25.16	30.28	31.23	26.86	46.06
LONG-TERM LIABILITIES	30.40	20.11	49.27	33.74	29.20	12.64
TOTAL LIABILITIES	61.81	45.27	79.55	64.97	56.06	58.70
SHAREHOLDERS' AND PROPRIETORS' EQUITY	38.19	54.73	20.45	35.03	43.94	41.30
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.75	2.27	1.03	1.07	1.95	1.26
QUICK RATIO	1.42	1.90	0.77	0.82	1.65	1.20
TOTAL LIABILITIES TO EQUITY	1.62	0.83	3.89	1.85	1.28	1.42
LONG-TERM LIABILITIES TO EQUITY	0.80	0.37	2.41	0.96	0.66	0.31
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.57	0.55	0.52	0.51	0.58	0.56

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
7.96%	10.04%	7.64%	12.02%	6.90%	16.95%	4.64%	8.41
34.50	31.93	33.58	31.37	33.29	28.06	32.11	30.70
8.61	6.03	10.45	8.58	11.64	10.10	16.51	16.28
4.23	5.84	4.14	8.21	2.95	5.55	3.13	1.71
55.30	53.84	55.81	60.18	54.78	60.66	56.39	57.10
8.45	8.32	8.97	7.54	10.47	10.88	13.34	16.92
2.33	2.79	2.74	2.33	3.41	3.87	4.09	4.26
6.12	5.53	6.23	5.21	7.06	7.01	9.25	12.66
75.54	76.27	69.43	66.67	65.87	62.61	54.58	51.33
46.34	42.27	39.44	37.97	34.45	35.35	27.50	25.12
29.20	34.00	29.99	28.70	31.42	27.26	27.08	26.21
11.34	8.32	9.63	6.52	6.42	4.29	5.57	4.97
6.22	3.68	5.56	3.40	3.51	2.47	2.81	2.52
5.12	4.64	4.07	3.12	2.91	1.82	2.76	2.45
40.44	44.17	40.29	37.03	41.39	36.09	39.09	41.32
4.26	1.99	3.90	2.79	3.83	3.25	4.52	1.58
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

9.63	7.88	9.33	4.14	9.93	2.67	7.82	4.08
14.90	11.39	13.68	10.56	13.33	8.88	13.13	10.34
6.79	6.00	8.05	9.72	9.87	9.56	12.17	10.94
31.32	25.27	31.06	24.42	33.13	21.11	33.12	25.36
31.46	22.68	30.01	19.98	31.63	21.59	23.46	12.77
62.78	47.95	61.07	44.40	64.76	42.70	56.58	38.13
37.22	52.05	38.93	55.60	35.24	57.30	43.42	61.87
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

1.77	2.13	1.80	2.46	1.65	2.87	1.70	2.25
1.89	1.89	1.46	2.11	1.30	2.40	1.20	1.61
1.69	0.92	1.57	0.80	1.84	0.75	1.30	0.62
0.85	0.44	0.77	0.36	0.90	0.38	0.54	0.21
0.61	0.55	0.57	0.57	0.52	0.56	0.50	0.49

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT						
Average assets per employee - All employees	$ 36,768	$ 45,370	$ 21,672	$ 27,480	$ 22,332	$ 20,269
Average assets per factory employee (Excluding Executives)	54,503	66,478	29,147	32,134	35,292	29,996
Average net worth per employee - All employees	14,553	25,069	4,711	9,063	9,908	7,370
Average gross plant investment per factory employee (Excluding Executives)	47,253	53,236	37,566	42,860	33,922	28,725
Net worth percentage of fixed assets	127.79%	190.68%	34.86%	67.21%	168.35%	145.60%
EMPLOYEES						
Percent factory - All employees	72.24%	74.13%	78.34%	85.83%	69.53%	78.51%
Percent administrative - All employees	14.95	13.97	15.86	10.00	22.26	17.29
Percent sales - All employees	12.81	11.90	5.80	4.17	8.21	4.20
SALES - VALUE OF PRODUCT PRODUCED						
INCLUDING EXECUTIVES						
Sales per employee - All employees	$ 73,459	$ 81,907	$ 57,415	$ 64,757	$ 52,608	$ 55,098
Sales per factory employee	103,753	114,905	73,472	74,500	78,534	70,694
Sales less material per factory employee	65,811	74,696	47,861	48,748	52,779	48,236
Sales per administrative employee	611,962	709,328	179,560	24,113	270,506	507,977
EXCLUDING EXECUTIVES						
Sales per employee - All employees	81,974	91,346	67,803	67,168	62,389	71,143
Sales per factory employee	109,813	121,113	77,999	74,500	82,928	79,297
Sales less material per factory employee	69,657	78,854	50,903	48,748	55,770	54,153
SALES PER SALESMAN	587,706	803,487	81,000	108,000	95,429	0
SALES TO CURRENT ASSETS	468%	401%	2,424%	1,283%	804%	483%
PAYROLL - INCLUDING TAXES AND BENEFITS						
INCLUDING EXECUTIVES						
Total payroll percentage of sales	40.78%	36.60%	32.05%	26.16%	41.29%	31.40%
Factory payroll percentage of gross plant investment	89.84	64.38	55.78	39.10	87.64	75.74
Payroll per employee - All employees	$ 29,290	$ 29,553	$ 17,403	$ 15,453	$ 20,695	$ 17,267
Payroll per factory employee	26,592	26,503	17,188	15,013	18,929	16,339
Payroll per administrative employee	34,967	38,404	12,618	3,092	23,216	19,526
Payroll per sales employee	40,133	42,229	7,740	7,185	17,278	19,771
PAYROLL - EXCLUDING TAXES AND BENEFITS						
EXCLUDING EXECUTIVES						
Payroll per employee - All employees	$ 22,627	$ 22,473	$ 13,905	$ 12,284	$ 15,871	$ 14,046
Payroll per factory employee	21,759	21,685	13,898	11,975	15,992	14,151
Payroll per administrative employee	17,808	16,226	4,481	2,269	11,835	10,828
Payroll per sales employee	31,990	33,374	4,051	5,449	9,040	0
EXECUTIVE PAYROLL						
Payroll per executive - All executives	51,987	63,646	10,490	3,411	25,855	21,989
Payroll per factory executive	33,063	30,907	3,426	0	10,639	15,304
Payroll per administrative executive	60,034	80,668	10,980	3,411	21,507	13,463
Payroll per sales executive	40,689	41,045	2,458	0	10,043	18,168
RECEIVABLES						
Collection period	57.5	59.5	25.8	33.5	43.4	50.4
PROFIT						
Gross profit percentage of sales	24.40%	29.37%	22.09%	24.56%	23.81%	24.99%
Average gross profit per factory employee	$ 27,213	$ 36,524	$ 17,837	$ 18,242	$ 20,265	$ 19,869
Income before taxes percentage of sales	3.23%	11.55%	5.94%	12.53%	1.77%	8.90%
Average income before taxes per employee	$ 2,608	$ 9,588	$ 3,875	$ 8,337	$ 1,286	$ 4,920

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 27,670	$ 32,345	$ 38,219	$ 48,222	$ 47,881	$ 59,926	$ 47,221	$ 51,871
43,723	47,696	57,415	72,691	68,015	91,843	62,524	68,896
10,894	15,794	15,255	27,256	17,730	34,081	20,931	31,744
40,527	42,584	50,346	57,859	56,057	69,430	44,227	48,619
150.37%	201.14%	126.14%	212.20%	96.57%	193.92%	121.04%	169.10%
68.92%	72.06%	71.50%	70.88%	75.78%	73.12%	80.12%	81.03%
18.91	17.70	14.37	15.21	10.98	12.89	8.50	7.57
12.17	10.24	14.13	13.91	13.24	13.99	11.38	11.40
$ 61,467	$ 67,051	$ 74,842	$ 78,506	$ 89,655	$109,157	$ 87,175	$ 89,778
92,040	97,277	106,971	113,940	121,148	158,761	109,628	112,665
59,716	61,896	67,720	76,039	74,775	99,803	68,149	74,454
372,820	409,497	594,239	624,405	868,790	878,281	1,250,657	1,356,103
70,928	78,637	83,364	87,107	97,374	120,506	93,032	96,186
97,658	101,229	113,522	120,598	127,367	167,261	115,596	119,833
63,343	64,416	71,872	80,621	78,550	105,199	71,973	79,486
266,738	330,979	510,739	467,817	825,871	915,314	1,342,920	1,705,327
493%	461%	396%	315%	377%	324%	367%	328%
41.29%	36.67%	41.10%	37.52%	40.08%	36.45%	40.23%	38.63%
120.28	73.09	78.86	61.49	77.68	58.95	83.48	68.19
$ 24,880	$ 23,708	$ 30,241	$ 29,418	$ 35,135	$ 38,959	$ 33,977	$ 33,958
23,111	21,618	27,443	26,591	31,257	34,678	30,242	29,315
30,377	31,170	35,054	36,300	44,031	49,035	41,913	54,505
27,879	23,377	42,522	40,493	53,513	66,439	60,127	59,865
$ 19,263	$ 18,832	$ 23,548	$ 22,482	$ 26,648	$ 28,539	$ 26,187	$ 25,321
19,294	18,656	22,559	21,898	25,059	27,920	23,741	22,718
16,140	12,946	18,574	17,682	20,124	18,500	20,731	20,249
21,191	17,161	34,478	33,194	43,137	52,278	50,835	50,220
38,570	37,212	53,270	67,413	70,600	92,210	74,131	86,652
22,229	15,958	36,252	32,639	43,874	45,338	48,920	44,262
40,356	39,362	60,483	78,546	90,339	130,940	91,416	122,701
19,680	13,370	41,641	35,041	65,356	66,841	78,892	80,330
52.5	57.0	60.1	64.8	63.1	55.7	62.7	65.3
24.79%	28.23%	24.71%	30.90%	23.96%	30.64%	23.24%	28.63%
$ 24,888	$ 29,570	$ 28,344	$ 37,587	$ 30,934	$ 51,590	$ 27,095	$ 35,660
2.56%	11.54%	2.91%	11.15%	4.13%	12.34%	5.64%	11.77%
$ 1,726	$ 7,726	$ 2,254	$ 8,696	$ 3,949	$ 13,653	$ 5,148	$ 10,826

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO $250,000		SALES FROM $250,000-$500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT						
Current Assets:						
Cash	$ 3.79	$ 6.44	$ 2.19	$ 2.16	$ 4.98	$ 3.00
Receivables	15.30	15.76	6.20	7.19	11.74	13.81
Inventories	4.99	4.92	3.16	2.68	3.51	0.94
Marketable securities	0.81	1.21	0.00	0.00	1.20	0.00
Other current assets	1.38	2.52	0.46	0.11	1.39	3.04
	26.27	30.85	12.01	12.14	22.82	20.79
Plant Investment:						
Land and building	5.44	6.17	0.78	1.77	2.13	0.00
Machinery and equipment	34.60	36.16	44.24	51.26	35.98	30.20
Other fixed assets	4.35	3.36	6.10	7.06	4.50	3.52
	44.39	45.69	51.12	60.09	42.61	33.72
Non-Current Assets	2.20	1.40	1.78	0.04	1.97	1.17
TOTAL INVESTMENT	72.86	77.94	64.91	72.27	67.40	55.68
INVESTMENT TURNOVER PER $100 OF SALES	137.25%	128.30%	154.06%	138.37%	148.37%	179.60%
EARNINGS						
Cost of Product	$75.60	$70.63	$77.91	$75.44	$76.19	$75.01
Selling Expenses	9.08	8.09	4.71	3.68	5.87	4.55
Administrative Expenses	10.89	9.66	10.15	7.32	15.30	11.08
	95.57	88.38	92.77	86.44	97.36	90.64
Income Before Interest, Other Income (Expense) and Taxes	4.43	11.62	7.23	13.56	2.64	9.36
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.08%	14.91%	11.14%	18.76%	3.92%	16.81%

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$5,000,000		SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 3.67	$ 4.51	$ 3.93	$ 7.13	$ 3.82	$ 9.85	$ 2.80	$ 5.84
14.08	15.10	15.98	17.29	16.72	14.69	16.68	17.33
3.65	2.86	5.08	4.75	5.81	5.56	8.57	8.99
1.14	1.55	0.69	2.03	0.58	0.78	0.81	0.10
1.21	1.29	1.66	4.44	1.12	2.55	1.16	0.89
23.75	25.31	27.34	35.64	28.05	33.43	30.02	33.15
5.39	5.59	5.32	5.48	6.36	7.05	7.38	9.88
33.45	36.32	35.65	39.04	35.05	34.68	28.88	28.83
4.64	3.74	4.85	3.42	3.21	2.39	2.79	2.71
43.48	45.65	45.82	47.94	44.62	44.12	39.05	41.42
2.09	1.23	2.09	1.77	2.35	1.71	3.04	0.96
69.32	72.19	75.25	85.35	75.02	79.26	72.11	75.53
144.26%	138.52%	132.89%	117.16%	133.30%	126.17%	138.68%	132.40%
$75.21	$71.77	$75.29	$69.10	$76.04	$69.36	$76.76	$71.37
7.84	6.65	10.00	8.85	9.79	9.09	9.68	9.40
13.30	10.86	10.53	10.64	8.67	8.82	6.91	7.17
96.35	89.28	95.82	88.59	94.50	87.27	93.35	87.94
3.65	10.72	4.18	11.41	5.50	12.73	6.65	12.06
5.27%	14.85%	5.55%	13.37%	7.33%	16.06%	9.22%	15.97%

REPORT ON OPERATIONS - VALUE ADDED = 100% - ALL FIRMS AND PROFIT LEADERS

	NEW ENGLAND AND UP-STATE NEW YORK		METROPOLITAN NEW YORK AND NEW JERSEY	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	40.54	37.51	41.91	33.30
FACTORY EXPENSES	20.63	18.42	22.25	22.27
TOTAL FACTORY COST OF PRODUCT	61.17	55.93	64.16	55.57
GROSS PROFIT	38.83	44.07	35.84	44.43
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	17.10	13.95	20.49	15.89
Selling expenses	13.72	10.77	9.76	8.99
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	30.82	24.72	30.25	24.88
INCOME BEFORE INTEREST EXPENSE	8.01	19.35	5.59	19.55
Interest expense	2.88	1.78	2.93	1.90
OPERATING INCOME	5.13	17.57	2.66	17.65
Other income (expense)	0.44	(0.08)	(0.98)	0.16
INCOME BEFORE INCOME TAXES	5.57	17.49	1.68	17.81

EASTERN PENNA., MARYLAND AND D.C.		SOUTHEAST ATLANTIC		EAST NORTH CENTRAL		SOUTH CENTRAL	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
44.35	38.42	41.70	34.57	41.60	41.25	42.03	38.57
19.69	15.93	22.19	21.05	19.22	16.68	20.67	21.13
64.04	54.35	63.89	55.62	60.82	57.93	62.70	59.70
35.96	45.65	36.11	44.38	39.18	42.07	37.30	40.30
14.53	9.84	16.75	11.84	16.27	13.20	16.14	11.30
12.55	13.97	13.43	10.87	14.24	13.04	15.01	14.31
27.08	23.81	30.18	22.71	30.51	26.24	31.15	25.61
8.88	21.84	5.93	21.67	8.67	15.83	6.15	14.69
3.02	2.22	3.15	1.57	2.98	1.46	3.06	2.75
5.86	19.62	2.78	20.10	5.69	14.37	3.09	11.94
0.45	0.03	1.10	0.69	0.97	0.14	1.79	3.94
6.31	19.65	3.88	20.79	6.66	14.51	4.88	15.88

SUPPORTING SCHEDULES - VALUE ADDED = 100% - ALL FIRMS AND PROFIT LEADERS

	NEW ENGLAND AND UP-STATE NEW YORK		METROPOLITAN NEW YORK AND NEW JERSEY	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	3.73%	4.03%	3.20%	1.49%
Direct wages	27.53	25.31	26.50	17.52
General factory salaries and wages	2.14	1.75	4.00	5.07
Packing, shipping and delivery wages	1.02	0.90	1.08	2.04
Payroll taxes	2.90	2.51	3.08	2.40
Employee benefits	3.22	3.01	4.05	4.78
TOTAL FACTORY PAYROLL	40.54	37.51	41.91	33.30
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.40	0.36	0.23	0.91
Depreciation - other	5.94	5.44	7.74	10.32
Taxes - real estate	0.26	0.21	0.11	0.46
Taxes - other	0.23	0.20	0.09	0.09
Insurance	1.38	1.36	1.37	0.96
Building rent	2.80	2.30	3.84	2.56
Utilities - heat, light, etc.	1.77	1.72	2.36	1.57
Equipment rental	0.74	0.98	0.03	0.00
Total Fixed Expenses	13.52	12.57	15.77	16.87
Other Expenses				
Factory supplies and expense	2.89	2.20	2.43	1.24
Packing, shipping and delivery expense	1.37	1.05	1.93	2.75
Repairs and maintenance	2.13	1.89	1.70	1.36
Other factory expenses	0.72	0.71	0.42	0.05
Total Other Expenses	7.11	5.85	6.48	5.40
TOTAL FACTORY EXPENSES	20.63	18.42	22.25	22.27
ADMINISTRATIVE EXPENSES				
Salaries - executive	5.91	6.57	8.27	9.13
Salaries - office	4.25	1.92	4.23	2.82
Payroll taxes	0.77	0.64	0.61	0.40
Employee benefits	0.87	0.55	1.26	0.77
Bad debts	0.36	0.58	0.20	0.19
Office supplies and expenses	0.82	0.72	0.69	0.34
Professional fees	1.04	0.83	1.50	0.97
Taxes - business	0.13	0.09	0.35	0.01
Telephone	0.90	0.68	0.83	0.41
Other administrative expenses	2.05	1.37	2.55	0.85
TOTAL ADMINISTRATIVE EXPENSES	17.10	13.95	20.49	15.89
SELLING EXPENSES				
Salaries - executive	1.63	0.68	1.34	0.95
Salaries and commissions - salesmen	6.46	5.66	4.13	5.89
Salaries - sales office clerical	1.03	0.81	0.32	0.00
Payroll taxes	0.61	0.44	0.34	0.51
Employee benefits	0.64	0.55	0.39	0.36
Advertising	0.53	0.54	1.05	0.00
Travel and entertainment	1.48	1.27	0.88	0.72
Other selling expenses	1.34	0.82	1.31	0.56
TOTAL SELLING EXPENSES	13.72	10.77	9.76	8.99

EASTERN PENNA., MARYLAND AND D.C.		SOUTHEAST ATLANTIC		EAST NORTH CENTRAL		SOUTH CENTRAL	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
3.38%	2.73%	3.18%	2.34%	2.70%	4.07%	3.21%	2.82%
28.48	22.71	29.19	24.60	27.61	23.68	28.01	23.84
4.01	3.40	2.55	1.80	2.94	4.36	2.77	2.29
1.45	1.31	1.32	1.45	0.84	0.89	1.33	2.72
3.38	2.62	2.95	2.43	3.27	2.82	2.84	2.42
3.65	5.65	2.51	1.95	4.24	5.43	3.87	4.48
44.35	38.42	41.70	34.57	41.60	41.25	42.03	38.57
0.30	0.53	0.38	0.32	0.31	0.64	0.35	0.43
5.09	4.66	6.68	8.00	5.51	4.95	6.05	8.03
0.26	0.18	0.33	0.15	0.20	0.40	0.24	0.27
0.14	0.11	0.45	0.51	0.57	0.85	0.38	0.35
1.02	0.62	1.08	0.83	0.83	0.63	1.01	0.63
2.21	0.67	2.16	1.80	1.73	0.62	2.17	0.62
1.74	1.53	2.03	1.97	1.77	1.83	1.90	2.04
0.65	0.17	0.96	1.00	0.92	0.11	1.12	0.04
11.41	8.47	14.07	14.58	11.84	10.03	13.22	12.41
3.42	3.90	3.30	2.24	3.66	3.21	3.02	3.01
1.78	1.24	1.26	1.02	0.92	0.97	1.58	3.22
2.00	1.60	2.38	2.23	1.86	1.48	1.96	1.92
1.08	0.72	1.18	0.98	0.94	0.99	0.89	0.57
8.28	7.46	8.12	6.47	7.38	6.65	7.45	8.72
19.69	15.93	22.19	21.05	19.22	16.68	20.67	21.13
4.01	3.34	4.12	2.17	5.08	3.28	4.47	2.28
3.74	1.41	4.96	3.07	3.26	3.06	3.99	3.61
0.59	0.37	0.65	0.38	0.71	0.62	0.68	0.36
0.94	0.64	0.82	1.11	1.17	0.94	1.28	0.73
0.46	0.67	0.81	0.68	0.51	0.21	0.61	0.41
0.65	0.53	0.72	0.54	0.64	0.46	0.71	0.44
1.04	0.67	1.02	1.11	0.93	0.53	0.84	0.76
0.17	0.03	0.28	0.24	0.62	0.64	0.25	0.36
0.81	0.47	0.87	0.50	0.74	0.33	0.76	0.51
2.12	1.71	2.50	2.04	2.61	3.13	2.55	1.84
14.53	9.84	16.75	11.84	16.27	13.20	16.14	11.30
2.12	2.14	1.64	0.53	2.55	1.82	2.29	2.32
5.15	4.89	6.48	6.20	6.43	6.05	7.07	6.59
1.07	1.45	1.33	0.78	0.99	1.27	1.15	0.65
0.53	0.58	0.60	0.22	0.67	0.42	0.68	0.60
0.45	0.70	0.52	0.46	0.65	0.78	0.66	0.63
0.53	0.27	0.78	0.57	0.67	0.29	0.70	0.33
1.36	0.88	0.90	1.07	1.29	1.00	1.46	2.21
1.34	3.06	1.18	1.04	0.99	1.41	1.00	0.98
12.55	13.97	13.43	10.87	14.24	13.04	15.01	14.31

REPORT ON OPERATIONS - VALUE ADDED = 100% - ALL FIRMS AND PROFIT LEADERS

	CHICAGO AREA		WEST NORTH CENTRAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	41.51	32.40	40.87	40.10
FACTORY EXPENSES	21.53	21.33	19.13	15.49
TOTAL FACTORY COST OF PRODUCT	63.04	53.73	60.00	55.59
GROSS PROFIT	36.96	46.27	40.00	44.41
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	14.62	15.48	18.23	17.03
Selling expenses	15.07	14.69	14.48	10.46
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	29.69	30.17	32.71	27.49
INCOME BEFORE INTEREST EXPENSE	7.27	16.10	7.29	16.92
Interest expense	2.76	2.29	2.98	1.05
OPERATING INCOME (LOSS)	4.51	13.81	4.31	15.87
Other income	0.79	1.10	1.64	5.10
INCOME BEFORE INCOME TAXES	5.30	14.91	5.95	20.97

PLAINS AND MOUNTAIN STATES		PACIFIC SOUTHWEST		PACIFIC NORTHWEST		CANADA	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
40.55	34.56	39.93	31.30	40.77	36.02	42.73	38.69
23.55	24.97	21.56	21.08	21.30	15.51	16.32	15.87
64.10	59.53	61.49	52.38	62.07	51.53	59.05	54.56
35.90	40.47	38.51	47.62	37.93	48.47	40.95	45.44
18.13	17.14	17.49	17.86	18.73	16.87	14.27	14.48
14.78	11.97	15.49	12.88	12.81	10.34	14.75	13.84
32.91	29.11	32.98	30.74	31.54	27.21	29.02	28.32
2.99	11.36	5.53	16.88	6.39	21.26	11.93	17.12
3.07	1.82	3.06	1.97	2.92	2.20	2.96	2.03
(0.08)	9.54	2.47	14.91	3.47	19.06	8.97	15.09
1.58	5.69	1.85	0.85	0.64	1.81	1.30	2.75
1.50	15.23	4.32	15.76	4.11	20.87	10.27	17.84

SUPPORTING SCHEDULES - VALUE ADDED = 100% - ALL FIRMS AND PROFIT LEADERS

	CHICAGO AREA		WEST NORTH CENTRAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.30%	1.50%	2.91%	2.71%
Direct wages	27.50	22.44	29.03	28.56
General factory salaries and wages	3.07	1.28	1.42	1.42
Packing, shipping and delivery wages	1.36	0.35	1.13	1.22
Payroll taxes	3.36	3.79	3.06	3.31
Employee benefits	3.92	3.04	3.32	2.88
TOTAL FACTORY PAYROLL	41.51	32.40	40.87	40.10
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.44	0.17	0.36	0.20
Depreciation - other	5.36	5.59	4.97	4.26
Taxes - real estate	0.58	0.69	0.40	0.65
Taxes - other	0.08	0.23	0.15	0.06
Insurance	1.09	0.88	1.16	0.95
Building rent	2.28	2.95	2.23	0.90
Utilities - heat, light, etc.	2.10	1.67	1.60	1.94
Equipment rental	0.59	0.87	0.94	0.02
Total Fixed Expenses	12.52	13.05	11.81	8.98
Other Expenses				
Factory supplies and expense	2.90	2.07	2.88	3.01
Packing, shipping and delivery expense	2.32	2.28	1.81	1.46
Repairs and maintenance	2.58	2.61	1.89	1.73
Other factory expenses	1.21	1.32	0.74	0.31
Total Other Expenses	9.01	8.28	7.32	6.51
TOTAL FACTORY EXPENSES	21.53	21.33	19.13	15.49
ADMINISTRATIVE EXPENSES				
Salaries - executive	4.20	5.21	6.33	6.49
Salaries - office	3.67	3.53	4.10	3.98
Payroll taxes	0.55	0.60	0.76	0.71
Employee benefits	0.80	0.86	1.41	0.52
Bad debts	0.33	0.27	0.68	1.04
Office supplies and expenses	0.73	0.75	0.75	0.73
Professional fees	1.08	1.38	0.81	0.60
Taxes - business	0.24	0.19	0.18	0.24
Telephone	0.78	0.96	0.63	0.63
Other administrative expenses	2.24	1.73	2.58	2.09
TOTAL ADMINISTRATIVE EXPENSES	14.62	15.48	18.23	17.03
SELLING EXPENSES				
Salaries - executive	2.25	1.43	2.41	1.93
Salaries and commissions - salesmen	6.20	6.11	6.57	5.68
Salaries - sales office clerical	1.32	1.99	1.38	0.45
Payroll taxes	0.66	1.00	0.67	0.48
Employee benefits	0.69	0.76	0.74	0.53
Advertising	0.72	0.85	0.56	0.41
Travel and entertainment	1.54	1.49	1.23	0.80
Other selling expenses	1.69	1.06	0.92	0.18
TOTAL SELLING EXPENSES	15.07	14.69	14.48	10.46

PLAINS AND MOUNTAIN STATES		PACIFIC SOUTHWEST		PACIFIC NORTHWEST		CANADA	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
3.60%	4.36%	2.77%	1.97%	2.02%	0.56%	2.56%	2.25%
28.44	22.34	28.16	24.31	28.85	26.33	31.51	28.59
2.07	1.95	1.82	0.45	2.00	2.85	3.58	3.65
1.60	2.65	1.51	0.98	0.96	0.60	0.90	0.51
2.75	2.26	2.75	2.37	3.30	3.10	1.27	0.73
2.09	1.00	2.92	1.22	3.64	2.58	2.91	2.96
40.55	34.56	39.93	31.30	40.77	36.02	42.73	38.69
0.25	0.73	0.23	0.00	0.27	0.07	0.35	0.23
6.32	6.73	5.80	5.11	5.59	4.81	4.85	4.96
0.33	0.47	0.14	0.01	0.24	0.24	0.57	0.57
0.46	0.60	0.45	0.43	0.31	0.25	0.09	0.03
1.38	1.85	1.58	0.94	1.05	0.68	0.43	0.55
3.36	2.81	3.53	4.10	4.17	3.09	1.81	2.28
1.76	1.41	1.65	1.30	1.11	0.73	1.17	0.87
2.38	3.63	0.93	0.53	2.06	0.34	0.24	0.19
16.24	18.23	14.31	12.42	14.80	10.21	9.51	9.68
2.43	2.14	3.03	4.82	1.88	1.64	2.18	1.77
1.65	1.40	1.40	0.43	1.35	0.55	1.64	1.78
2.46	2.18	2.25	2.70	2.23	2.46	2.04	1.92
0.77	1.02	0.57	0.71	1.04	0.65	0.95	0.72
7.31	6.74	7.25	8.66	6.50	5.30	6.81	6.19
23.55	24.97	21.56	21.08	21.30	15.51	16.32	15.87
6.43	8.10	4.94	4.74	5.56	8.41	3.75	4.45
4.42	3.22	4.52	4.26	4.57	2.25	3.75	3.71
0.80	0.52	0.65	0.50	0.75	0.65	0.22	0.08
0.77	0.45	0.71	0.23	0.95	1.13	0.43	0.42
0.86	0.71	0.91	1.18	0.96	0.56	1.14	0.64
0.86	0.51	0.84	1.16	0.96	0.52	0.94	1.14
0.87	1.13	1.29	0.72	1.01	0.69	1.01	1.11
0.31	0.57	0.19	0.16	0.56	0.45	0.37	0.38
0.67	0.64	0.79	0.41	0.78	0.46	0.62	0.50
2.14	1.29	2.65	4.50	2.63	1.75	2.04	2.05
18.13	17.14	17.49	17.86	18.73	16.87	14.27	14.48
2.44	4.81	1.90	0.88	1.78	0.99	1.57	1.73
7.32	4.12	7.27	7.61	6.69	5.71	7.30	6.75
0.94	0.43	1.26	0.17	1.05	0.84	1.43	0.83
0.56	0.35	0.57	0.37	0.59	0.50	0.22	0.12
0.41	0.32	0.53	0.15	0.45	0.64	0.51	0.49
0.72	0.40	0.85	1.00	0.84	0.57	1.04	0.92
1.19	0.53	1.18	1.32	0.94	0.63	1.53	1.69
1.20	1.01	1.93	1.38	0.47	0.46	1.15	1.31
14.78	11.97	15.49	12.88	12.81	10.34	14.75	13.84

REPORT ON OPERATIONS - SALES = 100% - ALL FIRMS AND PROFIT LEADERS

	NEW ENGLAND AND UP-STATE NEW YORK		METROPOLITAN NEW YORK AND NEW JERSEY	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	21.55	20.93	16.35	13.53
Other chargeable materials	4.60	4.72	7.42	2.96
Outside services	7.93	9.22	8.57	9.82
TOTAL MATERIALS	34.08	34.87	32.34	26.31
FACTORY PAYROLL	26.76	24.48	28.41	24.53
FACTORY EXPENSES	13.66	12.09	14.92	16.42
TOTAL FACTORY COST OF PRODUCT	74.50	71.44	75.67	67.26
GROSS PROFIT	25.50	28.56	24.33	32.74
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	11.30	9.16	13.77	11.71
Selling expenses	8.99	6.88	6.52	6.63
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	20.29	16.04	20.29	18.34
INCOME BEFORE INTEREST EXPENSE	5.21	12.52	4.04	14.40
Interest expense	1.89	1.17	1.94	1.39
OPERATING INCOME	3.32	11.35	2.10	13.01
Other income (expense)	0.33	(0.02)	(0.71)	0.12
INCOME BEFORE INCOME TAXES	3.65	11.33	1.39	13.13

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS				
Ink	1.12%	1.32%	1.64%	0.77%
Film	0.87	1.08	1.03	0.74
Plates	1.00	1.05	0.97	0.75
Other chargeable materials	1.61	1.27	3.78	0.70
TOTAL OTHER CHARGEABLE MATERIALS	4.60	4.72	7.42	2.96
OUTSIDE SERVICES				
Composition	0.75	2.38	0.94	2.80
Offset preparation	1.07	0.63	0.54	0.43
Printing	1.44	1.01	0.83	2.20
Binding	3.08	4.03	2.26	1.12
Other outside services	1.59	1.17	4.00	3.27
TOTAL OUTSIDE SERVICES	7.93	9.22	8.57	9.82

EASTERN PENNA., MARYLAND AND D.C.		SOUTHEAST ATLANTIC		EAST NORTH CENTRAL		SOUTH CENTRAL	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
19.90	16.85	22.07	21.24	23.26	21.11	22.13	24.96
5.08	4.85	4.96	4.53	4.83	7.16	5.22	5.63
10.38	11.47	7.41	7.54	7.85	5.18	9.83	9.78
35.36	33.17	34.44	33.31	35.94	33.45	37.18	40.37
28.70	26.58	27.28	22.97	26.57	27.38	26.34	23.05
12.77	10.76	14.63	14.56	12.23	11.14	12.99	12.35
76.83	70.51	76.35	70.84	74.74	71.97	76.51	75.77
23.17	29.49	23.65	29.16	25.26	28.03	23.49	24.23
9.25	6.28	11.04	7.86	10.45	8.88	10.19	6.77
8.14	8.79	8.69	6.96	9.22	8.63	9.45	8.69
17.39	15.07	19.73	14.82	19.67	17.51	19.64	15.46
5.78	14.42	3.92	14.34	5.59	10.52	3.85	8.77
1.95	1.50	2.04	1.02	1.89	0.98	1.94	1.63
3.83	12.92	1.88	13.32	3.70	9.54	1.91	7.14
0.31	0.00	0.72	0.44	0.63	0.12	1.11	2.30
4.14	12.92	2.60	13.76	4.33	9.66	3.02	9.44

1.19%	1.20%	1.13%	1.27%	1.40%	1.78%	1.36%	1.86%
1.18	1.21	1.39	1.80	0.96	0.97	1.05	0.75
1.23	0.91	1.27	0.83	1.23	1.80	1.21	1.07
1.48	1.53	1.17	0.63	1.24	2.61	1.60	1.95
5.08	4.85	4.96	4.53	4.83	7.16	5.22	5.63
0.78	1.20	0.68	0.59	0.33	0.90	1.00	2.26
1.18	1.35	1.15	0.53	1.96	2.13	1.93	2.71
2.26	3.27	1.93	1.62	0.81	0.78	2.27	1.52
3.93	2.05	1.07	0.79	2.42	1.01	2.82	2.36
2.23	3.60	2.58	4.01	2.33	0.36	1.81	0.93
10.38	11.47	7.41	7.54	7.85	5.18	9.83	9.78

SUPPORTING SCHEDULES - SALES = 100% - ALL FIRMS AND PROFIT LEADERS

	NEW ENGLAND AND UP-STATE NEW YORK		METROPOLITAN NEW YORK AND NEW JERSEY	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.46%	2.67%	2.02%	1.10%
Direct wages	18.14	16.55	18.06	12.91
General factory salaries and wages	1.43	1.11	2.75	3.72
Packing, shipping and delivery wages	0.66	0.57	0.71	1.50
Payroll taxes	1.92	1.64	2.10	1.77
Employee benefits	2.15	1.94	2.77	3.53
TOTAL FACTORY PAYROLL	26.76	24.48	28.41	24.53
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.27	0.23	0.17	0.68
Depreciation - other	3.92	3.53	5.17	7.61
Taxes - real estate	0.17	0.14	0.08	0.34
Taxes - other	0.15	0.12	0.06	0.07
Insurance	0.92	0.91	0.90	0.70
Building rent	1.84	1.50	2.56	1.88
Utilities - heat, light, etc.	1.17	1.13	1.59	1.16
Equipment rental	0.50	0.67	0.02	0.00
Total Fixed Expenses	8.94	8.23	10.55	12.44
Other Expenses				
Factory supplies and expense	1.92	1.45	1.68	0.91
Packing, shipping and delivery expense	0.91	0.69	1.29	2.03
Repairs and maintenance	1.40	1.25	1.13	1.00
Other factory expenses	0.49	0.47	0.27	0.04
Total Other Expenses	4.72	3.86	4.37	3.98
TOTAL FACTORY EXPENSES	13.66	12.09	14.92	16.42
ADMINISTRATIVE EXPENSES				
Salaries - executive	3.89	4.35	5.75	6.73
Salaries - office	2.84	1.25	2.79	2.07
Payroll taxes	0.51	0.42	0.41	0.29
Employee benefits	0.58	0.36	0.86	0.57
Bad debts	0.24	0.39	0.13	0.14
Office supplies and expenses	0.54	0.47	0.45	0.25
Professional fees	0.68	0.52	1.01	0.72
Taxes - business	0.08	0.06	0.20	0.01
Telephone	0.59	0.45	0.54	0.30
Other administrative expenses	1.35	0.89	1.63	0.63
TOTAL ADMINISTRATIVE EXPENSES	11.30	9.16	13.77	11.71
SELLING EXPENSES				
Salaries - executive	1.07	0.42	0.84	0.70
Salaries and commissions - salesmen	4.24	3.60	2.92	4.35
Salaries - sales office clerical	0.68	0.53	0.18	0.00
Payroll taxes	0.40	0.28	0.24	0.38
Employee benefits	0.43	0.35	0.26	0.26
Advertising	0.35	0.36	0.63	0.00
Travel and entertainment	0.97	0.80	0.57	0.53
Other selling expenses	0.85	0.54	0.88	0.41
TOTAL SELLING EXPENSES	8.99	6.88	6.52	6.63

EASTERN PENNA., MARYLAND AND D.C.		SOUTHEAST ATLANTIC		EAST NORTH CENTRAL		SOUTH CENTRAL	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
2.19%	1.94%	2.07%	1.54%	1.74%	2.73%	2.01%	1.76%
18.41	15.76	19.14	16.49	17.56	15.73	17.55	13.95
2.60	2.28	1.66	1.18	1.91	2.87	1.76	1.45
0.91	0.84	0.84	0.91	0.55	0.58	0.85	1.73
2.24	1.81	1.93	1.63	2.10	1.87	1.79	1.44
2.35	3.95	1.64	1.22	2.71	3.60	2.38	2.72
28.70	26.58	27.28	22.97	26.57	27.38	26.34	23.05
0.19	0.38	0.26	0.20	0.20	0.42	0.23	0.27
3.33	3.19	4.37	5.58	3.48	3.31	3.76	4.62
0.17	0.13	0.22	0.09	0.13	0.27	0.16	0.17
0.08	0.06	0.30	0.35	0.36	0.58	0.23	0.21
0.66	0.41	0.71	0.58	0.52	0.43	0.64	0.39
1.46	0.43	1.43	1.28	1.14	0.44	1.37	0.33
1.12	1.05	1.34	1.39	1.13	1.22	1.20	1.24
0.40	0.12	0.67	0.75	0.56	0.07	0.74	0.02
7.41	5.77	9.30	10.22	7.52	6.74	8.33	7.25
2.22	2.61	2.17	1.52	2.34	2.10	1.91	1.80
1.16	0.81	0.82	0.65	0.58	0.65	0.97	1.75
1.31	1.10	1.57	1.52	1.19	1.00	1.22	1.18
0.67	0.47	0.77	0.65	0.60	0.65	0.56	0.37
5.36	4.99	5.33	4.34	4.71	4.40	4.66	5.10
12.77	10.76	14.63	14.56	12.23	11.14	12.99	12.35
2.55	2.02	2.73	1.41	3.26	2.25	2.83	1.37
2.34	1.00	3.29	1.94	2.10	2.05	2.50	2.12
0.37	0.24	0.43	0.25	0.46	0.42	0.43	0.22
0.60	0.42	0.54	0.72	0.75	0.64	0.79	0.43
0.28	0.39	0.52	0.46	0.33	0.13	0.39	0.25
0.43	0.37	0.48	0.38	0.41	0.31	0.45	0.26
0.69	0.45	0.65	0.73	0.59	0.36	0.53	0.43
0.11	0.02	0.18	0.16	0.39	0.43	0.16	0.23
0.53	0.31	0.56	0.32	0.47	0.22	0.48	0.29
1.35	1.06	1.66	1.49	1.69	2.07	1.63	1.17
9.25	6.28	11.04	7.86	10.45	8.88	10.19	6.77
1.35	1.16	1.05	0.31	1.63	1.25	1.43	1.38
3.33	3.17	4.22	3.97	4.18	3.95	4.46	4.05
0.72	1.03	0.86	0.47	0.65	0.84	0.73	0.43
0.34	0.37	0.39	0.15	0.44	0.28	0.43	0.37
0.30	0.48	0.33	0.28	0.42	0.53	0.41	0.38
0.36	0.17	0.51	0.40	0.44	0.19	0.45	0.20
0.90	0.56	0.58	0.70	0.81	0.66	0.92	1.29
0.84	1.85	0.75	0.68	0.65	0.93	0.62	0.59
8.14	8.79	8.69	6.96	9.22	8.63	9.45	8.69

REPORT ON OPERATIONS - SALES = 100% - ALL FIRMS AND PROFIT LEADERS

	CHICAGO AREA		WEST NORTH CENTRAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	21.20	15.36	22.93	23.27
Other chargeable materials	5.00	5.05	4.34	4.31
Outside services	9.94	9.94	8.70	8.80
TOTAL MATERIALS	36.14	30.35	35.97	36.38
FACTORY PAYROLL	26.31	22.16	26.03	25.54
FACTORY EXPENSES	13.65	14.77	12.28	9.94
TOTAL FACTORY COST OF PRODUCT	76.10	67.28	74.28	71.86
GROSS PROFIT	23.90	32.72	25.72	28.14
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	9.54	11.06	11.80	10.87
Selling expenses	9.66	10.62	9.31	6.70
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	19.20	21.68	21.11	17.57
INCOME BEFORE INTEREST EXPENSE	4.70	11.04	4.61	10.57
Interest expense	1.71	1.53	1.88	0.66
OPERATING INCOME (LOSS)	2.99	9.51	2.73	9.91
Other income	0.48	0.75	1.02	3.20
INCOME BEFORE INCOME TAXES	3.47	10.26	3.75	13.11

SUPPORTING SCHEDULES - SALES = 100%

	CHICAGO AREA		WEST NORTH CENTRAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS				
Ink	1.59%	0.75%	1.29%	1.37%
Film	1.23	0.90	1.13	1.37
Plates	1.08	0.94	1.10	1.29
Other chargeable materials	1.10	2.46	0.82	0.28
TOTAL OTHER CHARGEABLE MATERIALS	5.00	5.05	4.34	4.31
OUTSIDE SERVICES				
Composition	0.84	1.95	1.38	1.70
Offset preparation	1.50	1.78	1.77	0.97
Printing	1.96	2.33	1.72	4.05
Binding	3.14	1.47	1.04	0.92
Other outside services	2.50	2.41	2.79	1.16
TOTAL OUTSIDE SERVICES	9.94	9.94	8.70	8.80

PLAINS AND MOUNTAIN STATES		PACIFIC SOUTHWEST		PACIFIC NORTHWEST		CANADA	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
20.78	19.90	20.50	19.01	19.36	21.86	21.99	20.98
4.76	5.29	4.42	2.43	5.35	4.00	5.00	4.44
9.75	8.06	11.90	12.27	9.81	7.42	9.79	9.80
35.29	33.25	36.82	33.71	34.52	33.28	36.78	35.22
26.22	22.87	25.29	20.85	26.79	24.59	27.02	25.09
15.29	16.54	13.64	13.84	13.87	10.50	10.34	10.28
76.80	72.66	75.75	68.40	75.18	68.37	74.14	70.59
23.20	27.34	24.25	31.60	24.82	31.63	25.86	29.41
11.85	11.84	11.02	12.02	12.18	11.00	9.06	9.41
9.50	8.02	9.74	8.52	8.47	6.73	9.23	8.91
21.35	19.86	20.76	20.54	20.65	17.73	18.29	18.32
1.85	7.48	3.49	11.06	4.17	13.90	7.57	11.09
1.95	1.11	1.93	1.30	1.93	1.49	1.86	1.33
(0.10)	6.37	1.56	9.76	2.24	12.41	5.71	9.76
1.03	3.63	1.25	0.58	0.41	1.15	0.82	1.74
0.93	10.00	2.81	10.34	2.65	13.56	6.53	11.50

1.28%	1.16%	1.23%	0.52%	1.21%	0.78%	1.26%	1.23%
1.19	1.23	1.30	0.59	1.27	0.97	1.30	1.26
1.17	1.90	1.03	0.32	1.31	1.17	1.18	1.03
1.12	1.00	0.86	1.00	1.56	1.08	1.26	0.92
4.76	5.29	4.42	2.43	5.35	4.00	5.00	4.44
1.15	0.58	0.86	1.83	0.48	0.07	1.22	1.43
0.93	0.74	1.89	1.68	0.75	0.53	2.15	2.14
3.61	4.56	3.93	4.03	4.31	0.42	2.31	2.29
2.08	1.58	2.71	2.44	2.75	4.73	1.54	1.27
1.98	0.60	2.51	2.29	1.52	1.67	2.57	2.67
9.75	8.06	11.90	12.27	9.81	7.42	9.79	9.80

SUPPORTING SCHEDULES - SALES = 100% - ALL FIRMS AND PROFIT LEADERS

	CHICAGO AREA		WEST NORTH CENTRAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	1.49%	1.14%	1.86%	1.71%
Direct wages	17.47	15.27	18.50	18.24
General factory salaries and wages	1.90	0.89	0.92	0.90
Packing, shipping and delivery wages	0.86	0.24	0.70	0.76
Payroll taxes	2.13	2.53	1.95	2.09
Employee benefits	2.46	2.09	2.10	1.84
TOTAL FACTORY PAYROLL	26.31	22.16	26.03	25.54
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.28	0.13	0.23	0.13
Depreciation - other	3.33	3.72	3.19	2.75
Taxes - real estate	0.37	0.48	0.26	0.41
Taxes - other	0.05	0.15	0.10	0.04
Insurance	0.70	0.61	0.75	0.60
Building rent	1.46	2.01	1.45	0.55
Utilities - heat, light, etc.	1.33	1.14	1.02	1.24
Equipment rental	0.38	0.60	0.60	0.01
Total Fixed Expenses	7.90	8.84	7.60	5.73
Other Expenses				
Factory supplies and expense	1.84	1.46	1.83	1.95
Packing, shipping and delivery expense	1.50	1.66	1.16	0.94
Repairs and maintenance	1.64	1.83	1.21	1.11
Other factory expenses	0.77	0.98	0.48	0.21
Total Other Expenses	5.75	5.93	4.68	4.21
TOTAL FACTORY EXPENSES	13.65	14.77	12.28	9.94
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.78	3.80	4.12	4.14
Salaries - office	2.40	2.54	2.63	2.52
Payroll taxes	0.36	0.42	0.49	0.45
Employee benefits	0.51	0.62	0.94	0.34
Bad debts	0.22	0.18	0.42	0.66
Office supplies and expenses	0.47	0.52	0.48	0.47
Professional fees	0.69	0.97	0.52	0.38
Taxes - business	0.16	0.13	0.13	0.16
Telephone	0.50	0.68	0.40	0.40
Other administrative expenses	1.45	1.20	1.67	1.35
TOTAL ADMINISTRATIVE EXPENSES	9.54	11.06	11.80	10.87
SELLING EXPENSES				
Salaries - executive	1.41	1.12	1.56	1.26
Salaries and commissions - salesmen	4.00	4.21	4.21	3.63
Salaries - sales office clerical	0.86	1.51	0.88	0.28
Payroll taxes	0.43	0.71	0.43	0.31
Employee benefits	0.44	0.55	0.48	0.34
Advertising	0.46	0.60	0.37	0.26
Travel and entertainment	0.99	1.13	0.78	0.51
Other selling expenses	1.07	0.79	0.60	0.11
TOTAL SELLING EXPENSES	9.66	10.62	9.31	6.70

PLAINS AND MOUNTAIN STATES		PACIFIC SOUTHWEST		PACIFIC NORTHWEST		CANADA	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
2.35%	2.97%	1.74%	1.30%	1.32%	0.37%	1.59%	1.41%
18.38	14.94	17.84	16.22	18.99	18.00	20.02	18.69
1.34	1.23	1.15	0.29	1.29	2.02	2.23	2.31
1.02	1.56	0.96	0.65	0.64	0.37	0.55	0.33
1.78	1.47	1.74	1.58	2.16	2.14	0.81	0.48
1.35	0.70	1.86	0.81	2.39	1.69	1.82	1.87
26.22	22.87	25.29	20.85	26.79	24.59	27.02	25.09
0.16	0.45	0.14	0.00	0.17	0.04	0.22	0.15
4.10	4.32	3.65	3.36	3.64	3.26	3.07	3.23
0.21	0.30	0.09	0.01	0.16	0.17	0.37	0.38
0.30	0.38	0.29	0.29	0.21	0.17	0.06	0.02
0.90	1.19	0.98	0.64	0.68	0.47	0.27	0.36
2.22	1.92	2.24	2.64	2.74	2.09	1.18	1.48
1.13	0.95	1.05	0.85	0.74	0.48	0.73	0.56
1.57	2.63	0.59	0.35	1.40	0.23	0.15	0.12
10.59	12.14	9.03	8.14	9.74	6.91	6.05	6.30
1.55	1.38	1.94	3.20	1.23	1.11	1.36	1.14
1.07	0.93	0.88	0.25	0.77	0.37	1.03	1.14
1.58	1.41	1.43	1.78	1.44	1.68	1.31	1.24
0.50	0.68	0.36	0.47	0.69	0.43	0.59	0.46
4.70	4.40	4.61	5.70	4.13	3.59	4.29	3.98
15.29	16.54	13.64	13.84	13.87	10.50	10.34	10.28
4.25	5.77	3.07	3.34	3.60	5.40	2.40	2.90
2.88	2.11	2.85	2.85	2.98	1.48	2.39	2.41
0.52	0.35	0.40	0.34	0.49	0.44	0.14	0.05
0.50	0.32	0.45	0.15	0.62	0.74	0.27	0.27
0.54	0.47	0.58	0.79	0.63	0.34	0.70	0.41
0.56	0.35	0.52	0.75	0.63	0.35	0.61	0.76
0.57	0.78	0.84	0.48	0.66	0.47	0.65	0.72
0.20	0.37	0.12	0.10	0.34	0.29	0.23	0.24
0.44	0.43	0.50	0.27	0.51	0.32	0.39	0.32
1.39	0.89	1.69	2.95	1.72	1.17	1.28	1.33
11.85	11.84	11.02	12.02	12.18	11.00	9.06	9.41
1.57	3.24	1.21	0.58	1.19	0.68	0.98	1.10
4.70	2.81	4.60	5.05	4.39	3.61	4.53	4.33
0.61	0.30	0.79	0.11	0.70	0.58	0.89	0.53
0.36	0.24	0.36	0.24	0.40	0.33	0.14	0.08
0.26	0.22	0.34	0.10	0.30	0.40	0.32	0.32
0.48	0.26	0.55	0.64	0.56	0.39	0.66	0.60
0.76	0.34	0.75	0.87	0.61	0.43	0.98	1.11
0.76	0.61	1.14	0.93	0.32	0.31	0.73	0.84
9.50	8.02	9.74	8.52	8.47	6.73	9.23	8.91

BALANCE SHEET - ALL FIRMS

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
ASSETS			
CURRENT ASSETS			
Cash	7.85%	12.66%	8.66%
Receivables	32.93	32.97	31.48
Inventories	9.35	11.77	12.54
Other current assets	5.41	4.39	2.67
TOTAL CURRENT ASSETS	55.54	61.79	55.35
FIXED ASSETS			
Real estate	9.57	6.51	9.89
Less: Accumulated depreciation	2.47	2.00	3.54
	7.10	4.51	6.35
Machinery and equipment	71.26	81.21	63.75
Less: Accumulated depreciation	41.95	55.42	33.62
	29.31	25.79	30.13
Other fixed assets	8.14	8.51	11.14
Less: Accumulated depreciation	4.53	4.20	5.21
	3.61	4.31	5.93
NET FIXED ASSETS	40.02	34.61	42.41
OTHER ASSETS	4.44	3.60	2.24
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	9.50	11.85	11.09
Accounts payable	13.85	17.34	13.35
Other current liabilities	7.42	8.52	8.41
TOTAL CURRENT LIABILITIES	30.77	37.71	32.85
LONG-TERM LIABILITIES	30.87	29.76	28.00
TOTAL LIABILITIES	61.64	67.47	60.85
SHAREHOLDERS' AND PROPRIETORS' EQUITY	38.36	32.53	39.15
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.81	1.64	1.68
QUICK RATIO	1.50	1.33	1.30
TOTAL LIABILITIES TO EQUITY	1.61	2.07	1.55
LONG-TERM LIABILITIES TO EQUITY	0.80	0.91	0.72
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.59	0.68	0.53

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
7.70%	6.98%	7.02%	5.72%	8.21%	9.43%	8.85%	7.40%	2.12%
30.26	32.91	33.24	34.35	30.85	35.25	34.77	32.27	35.74
10.83	10.94	11.66	12.52	12.55	9.17	7.06	10.60	10.17
2.67	3.47	3.28	2.23	3.97	3.46	4.79	5.21	4.26
51.46	54.30	55.20	54.92	55.58	57.31	55.47	55.48	52.29
10.99	11.20	13.09	9.09	9.17	7.91	3.43	6.10	11.70
2.85	4.18	4.44	3.53	3.20	2.79	1.34	1.34	2.78
8.14	7.02	8.65	5.56	5.97	5.12	2.09	4.76	8.92
72.47	65.11	68.78	69.16	68.64	75.23	74.03	75.73	65.34
39.40	36.83	40.27	38.75	39.87	44.79	41.17	44.97	32.28
33.07	28.28	28.51	30.41	28.77	30.44	32.86	30.76	33.06
9.74	7.43	8.11	9.85	9.17	10.42	12.44	9.02	6.28
5.57	3.49	4.99	5.56	5.24	6.28	6.85	5.01	3.27
4.17	3.94	3.12	4.29	3.93	4.14	5.59	4.01	3.01
45.38	39.24	40.28	40.26	38.67	39.70	40.54	39.53	44.99
3.16	6.46	4.52	4.82	5.75	2.99	3.99	4.99	2.72
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
9.55	8.77	8.91	10.62	7.67	11.58	8.61	9.37	7.45
11.92	14.13	14.77	14.61	13.58	12.51	13.05	13.74	17.21
7.98	9.68	7.66	8.29	10.62	5.24	8.58	8.80	8.87
29.45	32.58	31.34	33.52	31.87	29.33	30.24	31.91	33.53
35.56	28.90	31.06	34.54	30.56	31.90	27.79	29.17	22.56
65.01	61.48	62.40	68.06	62.43	61.23	58.03	61.08	56.09
34.99	38.52	37.60	31.94	37.57	38.77	41.97	38.92	43.91
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1.75	1.67	1.76	1.64	1.74	1.95	1.83	1.74	1.56
1.38	1.33	1.39	1.25	1.35	1.64	1.60	1.41	1.26
1.86	1.60	1.66	2.13	1.66	1.58	1.38	1.57	1.28
1.02	0.75	0.83	1.08	0.81	0.82	0.66	0.75	0.51
0.54	0.57	0.59	0.56	0.58	0.60	0.56	0.59	0.49

SIGNIFICANT FACTS - ALL FIRMS

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
INVESTMENT			
Average assets per employee - All employees	$ 38,825	$ 52,534	$ 37,930
Average assets per factory employee (Excluding Executives)	57,687	74,089	52,910
Average net worth per employee - All employees	15,461	20,506	15,675
Average gross plant investment per factory employee (Excluding Executives)	44,255	71,075	45,287
Net worth percentage of fixed assets	170.02%	130.09%	99.90%
EMPLOYEES			
Percent factory - All employees	73.26%	75.39%	76.54%
Percent administrative - All employees	15.17	18.00	12.68
Percent sales - All employees	11.57	6.61	10.78
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 71,416	$ 86,646	$ 76,782
Sales per factory employee	98,535	118,200	102,942
Sales less material per factory employee	64,247	78,751	64,170
Sales per administrative employee	648,593	649,733	684,673
EXCLUDING EXECUTIVES			
Sales per employee - All employees	80,098	95,987	85,488
Sales per factory employee	105,320	122,091	108,658
Sales less material per factory employee	68,624	81,334	67,836
SALES PER SALESMAN	664,869	798,636	894,230
SALES TO CURRENT ASSETS	472%	319%	427%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	41.40%	42.65%	40.61%
Factory payroll percentage of gross plant investment	122.37	64.61	81.73
Payroll per employee - All employees	$ 29,109	$ 35,939	$ 30,003
Payroll per factory employee	25,794	30,906	27,390
Payroll per administrative employee	39,381	51,803	35,038
Payroll per sales employee	41,767	48,138	42,708
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 22,036	$ 25,244	$ 22,984
Payroll per factory employee	20,696	24,566	22,169
Payroll per administrative employee	18,519	20,332	18,755
Payroll per sales employee	34,138	37,244	31,582
EXECUTIVE PAYROLL			
Payroll per executive - All executives	57,048	98,142	60,491
Payroll per factory executive	35,851	18,238	45,083
Payroll per administrative executive	72,524	122,766	71,763
Payroll per sales executive	43,123	42,550	52,782
RECEIVABLES			
Collection period	59.7	63.2	56.7
PROFIT			
Gross profit percentage of sales	25.50%	24.33%	23.17%
Average gross profit per factory employee	$ 27,201	$ 30,915	$ 25,713
Income before taxes percentage of sales	3.65%	1.39%	4.14%
Average income before taxes per employee	$ 2,974	$ 1,147	$ 3,490

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
$ 31,522	$ 39,380	$ 37,901	$ 42,183	$ 37,049	$ 31,324	$ 35,618	$ 36,719	$ 37,454
44,598	55,999	55,481	62,487	54,668	48,121	56,134	56,592	56,082
11,190	15,066	15,588	13,332	15,421	12,241	14,570	15,670	16,566
40,082	45,305	49,731	53,314	44,543	44,615	49,509	48,375	45,822
89.05%	124.82%	136.36%	94.40%	108.29%	148.17%	159.26%	123.22%	114.27%
74.30%	74.79%	72.88%	72.73%	71.34%	69.47%	69.16%	69.25%	71.97%
14.25	12.86	13.99	13.67	15.22	16.66	16.67	16.74	13.59
11.45	12.35	13.13	13.60	13.44	13.87	14.17	14.01	14.44
$ 61,371	$ 75,462	$ 74,868	$ 87,409	$ 72,805	$ 68,827	$ 81,557	$ 79,242	$ 64,243
83,406	102,084	103,342	123,735	102,580	100,013	121,947	117,216	93,089
54,116	65,157	63,438	78,844	65,174	64,045	74,303	74,755	58,325
538,348	694,384	687,851	799,608	535,659	526,617	557,235	603,168	549,782
67,402	83,865	83,136	96,334	81,387	78,832	91,325	88,708	70,867
88,339	107,263	109,461	130,012	108,147	107,627	129,671	122,096	98,173
57,329	68,483	67,091	83,051	68,703	69,001	78,872	77,893	61,458
514,738	710,647	593,293	796,252	483,792	428,613	508,920	455,650	515,581
430%	416%	418%	618%	413%	504%	588%	488%	372%
41.11%	40.46%	40.36%	39.50%	41.76%	41.89%	39.37%	41.46%	39.10%
72.89	74.43	83.50	83.16	100.20	108.26	89.60	82.94	66.62
$ 24,774	$ 30,108	$ 29,698	$ 33,620	$ 30,172	$ 28,182	$ 31,123	$ 31,904	$ 24,665
22,096	26,756	26,627	31,112	26,520	25,500	28,951	29,392	24,330
31,291	38,832	34,719	36,494	39,075	33,391	31,377	38,146	23,762
37,680	42,034	44,074	46,702	39,371	38,165	40,230	37,850	30,787
$ 19,611	$ 21,947	$ 22,491	$ 25,588	$ 22,361	$ 22,353	$ 24,738	$ 24,384	$ 21,235
18,367	20,838	21,367	24,914	21,502	21,478	23,993	23,741	21,568
16,649	18,140	17,669	19,383	17,016	18,329	17,467	18,159	15,322
29,678	31,037	33,836	37,475	29,979	31,607	33,148	30,672	26,786
44,329	57,420	51,812	52,328	51,885	45,515	53,351	53,665	37,739
31,818	34,409	36,384	34,278	31,187	32,988	29,473	27,424	30,122
49,390	61,088	61,832	60,426	61,856	50,394	60,332	57,088	40,428
37,337	53,450	44,196	43,710	39,180	38,826	33,596	36,683	32,076
55.2	60.4	58.3	57.7	53.4	54.0	54.6	49.9	74.1
23.65%	25.26%	23.49%	23.90%	25.72%	23.20%	24.25%	24.82%	25.86%
$ 21,383	$ 27,547	$ 25,281	$ 32,390	$ 27,788	$ 25,274	$ 31,566	$ 31,286	$ 25,986
2.60%	4.33%	3.02%	3.47%	3.75%	0.93%	2.81%	2.65%	6.53%
$ 1,846	$ 3,343	$ 2,423	$ 3,320	$ 2,855	$ 926	$ 2,309	$ 2,579	$ 4,524

RETURN ON INVESTMENT - PER $100 OF SALES - ALL FIRMS

	NEW ENGLAND AND UP-STATE NEW YORK	METROPOLITAN NEW YORK AND NEW JERSEY	EASTERN PENNA., MARYLAND AND D.C.
INVESTMENT			
Current Assets:			
Cash	$ 4.27	$ 7.47	$ 4.61
Receivables	16.06	16.96	15.33
Inventories	4.82	5.62	5.63
Marketable securities	2.42	1.18	0.36
Other current assets	1.32	1.39	1.03
	28.89	32.62	26.96
Plant Investment:			
Land and building	6.42	6.41	5.42
Machinery and equipment	37.12	45.42	31.91
Other fixed assets	4.31	4.88	6.30
	47.85	56.71	43.63
Non-Current Assets	2.45	2.34	1.13
TOTAL INVESTMENT	79.19	91.67	71.72
INVESTMENT TURNOVER PER $100 OF SALES	126.28%	109.09%	139.43%
EARNINGS			
Cost of Product	$74.50	$75.67	$76.83
Selling Expenses	8.99	6.52	8.14
Administrative Expenses	11.30	13.77	9.25
	94.79	95.96	94.22
Income Before Interest, Other Income (Expense) and Taxes	5.21	4.04	5.78
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.58%	4.41%	8.06%

SOUTHEAST ATLANTIC	EAST NORTH CENTRAL	SOUTH CENTRAL	CHICAGO AREA	WEST NORTH CENTRAL	PLAINS AND MOUNTAIN STATES	PACIFIC SOUTHWEST	PACIFIC NORTHWEST	CANADA
$ 3.82	$ 3.47	$ 3.87	$ 2.67	$ 4.07	$ 4.30	$ 3.82	$ 3.72	$ 1.33
14.69	16.09	15.54	15.37	14.36	14.42	14.30	13.32	19.40
5.23	5.33	5.53	5.78	5.97	4.00	2.98	4.71	6.00
0.55	0.28	0.56	0.30	0.58	0.50	0.31	0.38	1.70
0.96	1.33	1.28	0.81	1.70	1.12	2.39	2.04	1.15
25.25	26.50	26.78	24.93	26.68	24.34	23.80	24.17	29.58
6.48	6.44	6.92	5.24	4.99	4.33	1.86	3.63	8.29
36.19	31.92	34.88	32.01	32.97	34.05	32.59	33.09	38.00
4.27	3.36	4.13	4.35	4.20	4.44	5.13	3.70	3.39
46.94	41.72	45.93	41.60	42.16	42.82	39.58	40.42	49.68
1.83	3.30	2.45	2.87	3.84	1.32	1.77	2.28	1.66
74.02	71.52	75.16	69.40	72.68	68.48	65.15	66.87	80.92
135.10%	139.82%	133.05%	144.09%	137.59%	146.03%	153.49%	149.54%	123.58%
$76.35	$74.74	$76.51	$76.10	$74.28	$76.80	$75.75	$75.18	$74.14
8.69	9.22	9.45	9.66	9.31	9.50	9.74	8.47	9.23
11.04	10.45	10.19	9.54	11.80	11.85	11.02	12.18	9.06
96.08	94.41	96.15	95.30	95.39	98.15	96.51	95.83	92.43
3.92	5.59	3.85	4.70	4.61	1.85	3.49	4.17	7.57
5.30%	7.82%	5.12%	6.77%	6.34%	2.70%	5.36%	6.24%	9.36%

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL FIRMS	608	$ 2,266,000	$ 4,226,000	$ 179,000
TOTAL - PROFIT LEADERS*	92	3,303,000	5,620,000	678,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$250,000	9	74,000	195,000	13,000
$250,000-$500,000	33	163,000	383,000	8,000
$500,000-$1,500,000	157	462,000	1,000,000	27,000
$1,500,000-$5,000,000	256	1,547,000	2,985,000	81,000
$5,000,000-$10,000,000	106	3,747,000	6,903,000	275,000
Over $10,000,000	47	10,762,000	19,197,000	1,153,000
PROFIT LEADERS				
0-$250,000	4	84,000	190,000	24,000
$250,000-$500,000	3	138,000	374,000	33,000
$500,000-$1,500,000	22	519,000	1,022,000	118,000
$1,500,000-$5,000,000	31	1,645,000	2,575,000	286,000
$5,000,000-$10,000,000	17	3,801,000	6,709,000	824,000
Over $10,000,000	15	11,740,000	19,922,000	2,449,000
BY GEOGRAPHIC REGIONS				
ALL FIRMS				
New England and Up-State New York	81	2,549,000	4,521,000	252,000
Metropolitan New York and New Jersey	12	2,436,000	4,094,000	(38,000)
Eastern Penna., Maryland and D.C.	41	3,294,000	5,972,000	435,000
Southeast Atlantic	71	2,408,000	4,417,000	187,000
East North Central	33	3,625,000	6,508,000	356,000
South Central	54	2,416,000	4,621,000	181,000
Chicago Area	43	3,468,000	6,285,000	204,000
West North Central	46	1,865,000	3,474,000	122,000
Plains and Mountain States	71	1,376,000	2,758,000	37,000
Pacific Southwest	58	1,418,000	3,031,000	73,000
Pacific Northwest	52	1,517,000	3,391,000	115,000
Canada	46	1,941,000	3,335,000	196,000
PROFIT LEADERS				
New England and Up-State New York	12	4,706,000	7,820,000	937,000
Metropolitan New York and New Jersey	3	2,936,000	4,372,000	669,000
Eastern Penna., Maryland and D.C.	6	9,800,000	14,790,000	2,202,000
Southeast Atlantic	8	4,747,000	8,989,000	1,211,000
East North Central	6	5,693,000	9,584,000	886,000
South Central	5	4,555,000	8,056,000	821,000
Chicago Area	7	2,384,000	4,549,000	472,000
West North Central	7	1,571,000	3,104,000	379,000
Plains and Mountain States	6	1,383,000	2,507,000	245,000
Pacific Southwest	8	1,397,000	2,516,000	249,000
Pacific Northwest	6	1,650,000	3,093,000	438,000
Canada	18	1,546,000	2,466,000	265,000

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See explanatory note on page 43.

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

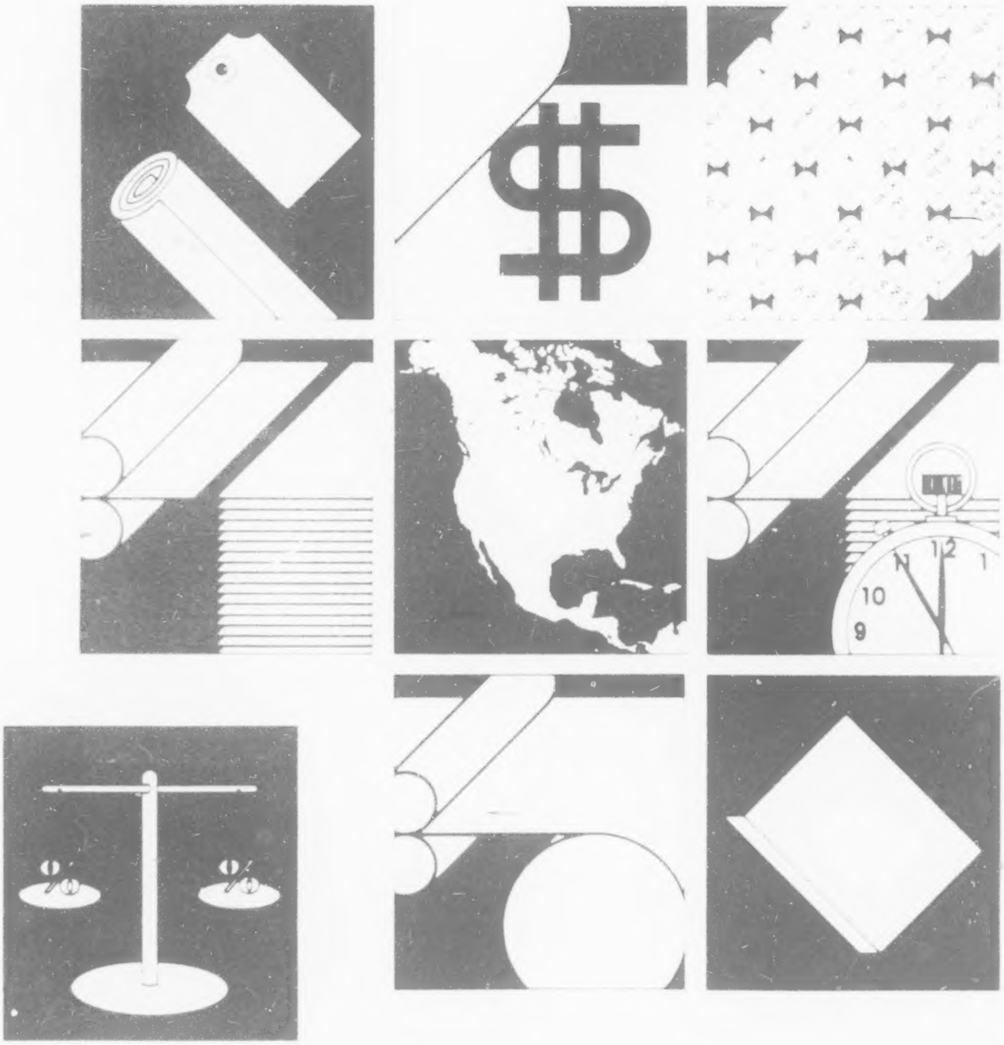
The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

A8740-1.6U

10/87

1987 Financial Ratio Study



Volume VI

Web Offset Printers—Heatset

1987
FINANCIAL
RATIO STUDY

Volume VI: Web Offset Printers—Heatset

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume,* and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset,* respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 59 Heatset Web Offset Printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales from $1.5 to $5 million, sales from $5 to $10 million, etc.; by product specialty - for example, Commercial and Advertising and Magazine and Periodical; and by percentage of paper supplied - for example, 0% to 11%, 11% to 21%, etc. Readers can compare their firm's operations with other firms having the same sales volume, product specialty or percentage of paper supplied in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H R Margolis Company

H. R. MARGOLIS COMPANY

Table of Contents

Page Number

FOREWORD.. 2

VALUE ADDED -- WHAT IT MEANS TO YOU.......................... 4- 5

CHAPTER 1 - BY SIZE OF FIRM.................................. 6-19
- Report on Operations - Value Added = 100%........................ 6- 7
- Supporting Schedules - Value Added = 100%........................ 8- 9
- Report on Operations - Sales = 100%.............................. 10-11
- Supporting Schedules - Sales = 100%.............................. 10-13
- Balance Sheet.. 14-15
- Significant Facts.. 16-17
- Return on Investment - Per $100 of Sales......................... 18-19

CHAPTER 2 - BY PRODUCT SPECIALTY............................. 20-27
- Report on Operations - Value Added = 100%........................ 20
- Supporting Schedules - Value Added = 100%........................ 21
- Report on Operations - Sales = 100%.............................. 22
- Supporting Schedules - Sales = 100%.............................. 22-23
- Balance Sheet.. 24
- Significant Facts.. 25
- Return on Investment - Per $100 of Sales......................... 26

CHAPTER 3 - BY PERCENTAGE OF PAPER SUPPLIED.................. 28-41
- Report on Operations - Value Added = 100%........................ 28-29
- Supporting Schedules - Value Added = 100%........................ 30-31
- Report on Operations - Sales = 100%.............................. 32-33
- Supporting Schedules - Sales = 100%.............................. 32-35
- Balance Sheet.. 36-37
- Significant Facts.. 38-39
- Return on Investment - Per $100 of Sales......................... 40-41

ABSOLUTE DATA.. 42-43

Congratulations on partaking of the web offset ratio study program. I'm sure that as you review the wealth of information contained in the book that you will find it to be a very rewarding exercise.

In case you are not acquainted with Web Offset Section activities, we have a very active group. WOS produces a variety of reports dealing with heatset web offset printing. Two of the most widely used of these publications are the *Heatset Web Offset Directory*, listing most heatset web offset plants in the United States and Canada, and its companion volume, the *Web Offset Product Catalog*, which describes the primary products printed by the companies listed in the Directory.

Over 1500 people attend our annual Web Offset Conference each year, where they hear discussions and exchange information on the technology and problems unique to web offset production. Transcriptions of these sessions are also published by the Section in the form of the *Web Offset Proceedings*, and are available for the use of industry firms.

Our next annual meeting will be held May 9-11, 1988 at the Westin-St. Francis, San Francisco, CA. Additional information about our meeting and publications is available from the Web Offset Section.

Edward W. Hill, Jr.
Executive Director
Web Offset Section

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	46.05	41.84	43.49
FACTORY EXPENSES	2[illegible].69	22.99	18.65
TOTAL FACTORY COST OF PRODUCT	70.74	64.83	62.14
GROSS PROFIT	29.26	35.17	37.86
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	10.27	7.63	16.52
Selling expenses	9.91	6.72	12.07
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	20.18	14.35	28.59
INCOME BEFORE INTEREST EXPENSE	9.08	20.82	9.27
Interest expense	4.10	2.12	4.17
OPERATING INCOME	4.98	18.70	5.10
Other income	1.08	1.35	1.28
INCOME BEFORE INCOME TAXES	6.06	20.05	6.38

---

* See page 10 for the definition of "Profit Leaders."

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
X	X	X	X
X	X	X	X
100.00%	100.00%	100.00%	100.00%
44.59	44.15	47.42	41.17
23.95	24.47	25.43	24.27
68.54	68.62	72.85	65.44
31.46	31.38	27.15	34.56
12.29	11.03	8.80	7.67
12.34	12.70	7.91	6.39
24.63	23.73	16.71	14.06
6.83	7.65	10.44	20.50
4.10	4.52	3.96	1.36
2.73	3.13	6.48	19.14
1.14	0.50	1.22	1.72
3.87	3.63	7.70	20.86

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.99%	2.27%	2.20%
Direct wages	28.71	23.67	32.60
General factory salaries and wages	4.88	6.22	1.94
Packing, shipping and delivery wages	1.55	1.42	0.97
Payroll taxes	2.89	2.41	3.21
Employee benefits	5.03	5.85	2.57
TOTAL FACTORY PAYROLL	46.05	41.84	43.49
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.43	0.33	0.00
Depreciation - other	6.70	6.58	3.12
Taxes - real estate	0.41	0.43	0.00
Taxes - other	0.37	0.12	0.47
Insurance	0.66	0.33	0.62
Building rent	1.07	0.67	3.19
Utilities - heat, light, etc.	3.15	2.95	2.08
Equipment rental	1.07	0.26	0.19
Total Fixed Expenses	13.86	11.67	9.67
Other Expenses			
Factory supplies and expense	4.45	4.47	2.08
Packing, shipping and delivery expense	1.72	2.14	3.45
Repairs and maintenance	3.13	2.51	2.53
Other factory expenses	1.53	2.20	0.92
Total Other Expenses	10.83	11.32	8.98
TOTAL FACTORY EXPENSES	24.69	22.99	18.65
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.08	1.89	2.64
Salaries - office	2.34	1.80	3.93
Payroll taxes	0.31	0.21	0.55
Employee benefits	0.64	0.65	0.89
Bad debts	0.78	0.43	2.39
Office supplies and expenses	0.48	0.31	1.54
Professional fees	0.84	0.34	1.91
Taxes - business	0.09	0.04	0.94
Telephone	0.50	0.31	0.71
Other administrative expenses	2.21	1.65	1.02
TOTAL ADMINISTRATIVE EXPENSES	10.27	7.63	16.52
SELLING EXPENSES			
Salaries - executive	0.97	0.59	2.19
Salaries and commissions - salesmen	4.33	3.46	4.09
Salaries - sales office clerical	1.23	0.73	0.81
Payroll taxes	0.33	0.14	0.40
Employee benefits	0.41	0.22	0.36
Advertising	0.42	0.10	0.71
Travel and entertainment	0.99	0.42	3.04
Other selling expenses	1.23	1.06	0.47
TOTAL SELLING EXPENSES	9.91	6.72	12.07

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
2.87%	2.43%	3.26%	2.33%
29.13	29.10	28.21	22.36
3.77	4.31	5.69	6.75
1.75	1.79	1.42	1.36
3.43	2.14	2.87	2.58
3.64	4.38	5.97	5.79
44.59	44.15%	47.42	41.17
0.25	0.58	0.48	0.35
6.85	6.69	6.87	7.08
0.34	0.39	0.48	0.39
0.49	0.44	0.29	0.14
1.07	0.78	0.46	0.34
1.39	1.67	0.62	0.77
3.26	2.79	3.27	3.12
0.54	0.56	1.50	0.30
14.19	13.90	13.97	12.49
3.70	4.48	4.90	4.50
1.48	1.98	1.63	2.58
3.41	3.10	3.05	2.31
1.17	1.01	1.88	2.39
9.76	10.57	11.46	11.78
23.95	24.47	25.43	24.27
2.85	2.61	1.56	1.90
3.07	2.14	1.98	1.78
0.42	0.32	0.25	0.22
0.68	0.68	0.59	0.73
0.79	0.79	0.68	0.29
0.59	0.46	0.38	0.29
1.04	0.99	0.65	0.37
0.09	0.13	0.03	0.06
0.61	0.71	0.38	0.30
2.15	2.20	2.30	1.73
12.29	11.03	8.80	7.67
1.62	1.10	0.58	0.60
5.77	6.13	3.18	2.77
0.95	1.91	1.17	0.83
0.57	0.34	0.23	0.14
0.47	0.52	0.36	0.23
0.51	0.51	0.34	0.11
0.80	1.30	0.85	0.46
1.65	0.89	1.20	1.25
12.34	12.70	7.91	6.39

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	33.74	28.89	33.09
Other chargeable materials	6.73	7.15	6.48
Outside services	5.42	3.68	6.87
TOTAL MATERIALS	45.89	39.72	46.44
FACTORY PAYROLL	24.87	25.38	23.28
FACTORY EXPENSES	13.32	13.76	9.89
TOTAL FACTORY COST OF PRODUCT	84.08	78.86	79.61
GROSS PROFIT	15.92	21.14	20.39
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	5.56	4.58	8.89
Selling expenses	5.37	4.01	6.48
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	10.93	8.59	15.37
INCOME BEFORE INTEREST EXPENSE	4.99	12.55	5.02
Interest expense	2.14	1.30	2.21
OPERATING INCOME	2.85	11.25	2.81
Other income	0.60	0.75	0.70
INCOME BEFORE INCOME TAXES	3.45	12.00	3.51

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS ($1.5 TO $5 MILLION)
OTHER CHARGEABLE MATERIALS			
Ink	4.12%	4.03%	2.98%
Film	0.61	0.76	0.87
Plates	0.84	0.88	1.68
Other chargeable materials	1.16	1.48	0.95
TOTAL OTHER CHARGEABLE MATERIALS	6.73	7.15	6.48
OUTSIDE SERVICES			
Composition	0.16	0.03	0.43
Offset preparation	0.84	0.58	0.12
Printing	1.51	1.01	1.41
Binding	1.78	1.16	4.18
Other outside services	1.13	0.90	0.73
TOTAL OUTSIDE SERVICES	5.42	3.68	6.87

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%
32.29	35.77	33.79	28.70
6.52	6.41	6.92	7.20
4.23	5.08	5.94	4.16
43.04	47.26	46.65	40.06
25.54	23.05	25.23	24.85
13.65	12.66	13.59	14.46
82.23	82.97	85.47	79.37
17.77	17.03	14.53	20.63
6.96	5.73	4.72	4.60
7.04	6.76	4.17	3.75
14.00	12.49	8.89	8.35
3.77	4.54	5.64	12.28
2.28	2.40	2.00	0.82
1.49	2.14	3.64	11.46
0.71	0.31	0.63	0.95
2.20	2.45	4.27	12.41

2.67%	3.96%	4.85%	4.70%
0.84	0.76	0.45	0.61
1.07	0.81	0.70	0.87
1.94	0.88	0.92	1.02
6.52	6.41	6.92	7.20
0.22	0.09	0.14	0.04
0.41	0.88	1.07	0.73
1.03	1.15	1.86	1.12
1.74	1.83	1.59	1.14
0.83	1.13	1.28	1.13
4.23	5.08	5.94	4.16

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	1.62%	1.31%	1.17%
Direct wages	15.45	14.55	17.46
General factory salaries and wages	2.66	3.71	1.02
Packing, shipping and delivery wages	0.83	0.81	0.51
Payroll taxes	1.58	1.49	1.72
Employee benefits	2.73	3.51	1.40
TOTAL FACTORY PAYROLL	24.87	25.38	23.28
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.23	0.21	0.00
Depreciation - other	3.59	3.94	1.66
Taxes - real estate	0.22	0.24	0.00
Taxes - other	0.21	0.06	0.25
Insurance	0.36	0.19	0.32
Building rent	0.56	0.41	1.70
Utilities - heat, light, etc.	1.70	1.72	1.09
Equipment rental	0.56	0.16	0.10
Total Fixed Expenses	7.43	6.93	5.12
Other Expenses			
Factory supplies and expense	2.42	2.71	1.11
Packing, shipping and delivery expense	0.92	1.30	1.81
Repairs and maintenance	1.68	1.47	1.35
Other factory expenses	0.87	1.35	0.50
Total Other Expenses	5.89	6.83	4.77
TOTAL FACTORY EXPENSES	13.32	13.76	9.89
ADMINISTRATIVE EXPENSES			
Salaries - executive	1.14	1.12	1.44
Salaries - office	1.28	1.09	2.07
Payroll taxes	0.17	0.13	0.30
Employee benefits	0.35	0.41	0.47
Bad debts	0.41	0.25	1.30
Office supplies and expenses	0.25	0.18	0.83
Professional fees	0.45	0.20	1.04
Taxes - business	0.05	0.03	0.51
Telephone	0.27	0.19	0.38
Other administrative expenses	1.19	0.98	0.55
TOTAL ADMINISTRATIVE EXPENSES	5.56	4.58	8.89
SELLING EXPENSES			
Salaries - executive	0.52	0.33	1.19
Salaries and commissions - salesmen	2.34	2.01	2.20
Salaries - sales office clerical	0.66	0.43	0.45
Payroll taxes	0.18	0.08	0.22
Employee benefits	0.23	0.13	0.19
Advertising	0.23	0.06	0.38
Travel and entertainment	0.52	0.25	1.60
Other selling expenses	0.69	0.72	0.25
TOTAL SELLING EXPENSES	5.37	4.01	6.48

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
1.66%	1.26%	1.75%	1.33%
16.62	15.04	14.94	13.71
2.22	2.33	3.05	4.01
1.00	0.91	0.74	0.76
1.97	1.09	1.56	1.61
2.07	2.42	3.19	3.43
25.54	23.05	25.23	24.85
0.15	0.30	0.25	0.23
3.90	3.48	3.62	4.19
0.20	0.21	0.24	0.22
0.31	0.22	0.16	0.08
0.61	0.39	0.24	0.20
0.77	0.83	0.33	0.48
1.88	1.44	1.74	1.81
0.29	0.28	0.79	0.18
8.11	7.15	7.37	7.39
2.07	2.33	2.68	2.72
0.82	0.98	0.89	1.56
1.96	1.66	1.58	1.33
0.69	0.54	1.07	1.46
5.54	5.51	6.22	7.07
13.65	12.66	13.59	14.46
1.62	1.39	0.85	1.13
1.76	1.09	1.06	1.08
0.24	0.17	0.14	0.14
0.39	0.36	0.33	0.47
0.44	0.40	0.35	0.16
0.33	0.23	0.19	0.17
0.59	0.48	0.34	0.22
0.05	0.07	0.02	0.03
0.34	0.38	0.20	0.18
1.20	1.16	1.24	1.02
6.96	5.73	4.72	4.60
0.90	0.55	0.31	0.34
3.30	3.39	1.62	1.50
0.55	0.97	0.62	0.49
0.32	0.18	0.12	0.08
0.27	0.28	0.19	0.14
0.29	0.26	0.19	0.07
0.46	0.68	0.44	0.28
0.95	0.45	0.68	0.85
7.04	6.76	4.17	3.75

BALANCE SHEET

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	2.58%	2.50%	3.33%
Receivables	28.69	24.32	47.40
Inventories	14.20	10.47	19.25
Other current assets	4.86	8.77	1.64
TOTAL CURRENT ASSETS	50.33	46.06	71.62
FIXED ASSETS			
Real estate	11.66	9.52	0.00
Less: Accumulated depreciation	3.64	2.61	0.00
	8.02	6.91	0.00
Machinery and equipment	71.43	71.30	89.92
Less: Accumulated depreciation	35.72	32.20	63.26
	35.71	39.10	26.66
Other fixed assets	4.28	3.03	9.27
Less: Accumulated depreciation	2.28	1.38	7.59
	2.00	1.65	1.68
NET FIXED ASSETS	45.73	47.66	28.34
OTHER ASSETS	3.94	6.28	0.04
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	9.40	3.41	18.41
Accounts payable	15.71	12.69	31.70
Other current liabilities	7.42	5.37	5.89
TOTAL CURRENT LIABILITIES	32.53	21.47	56.00
LONG-TERM LIABILITIES	31.89	25.36	18.61
TOTAL LIABILITIES	64.42	46.83	74.61
SHAREHOLDERS' AND PROPRIETORS' EQUITY	35.58	53.17	25.39
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.55	2.15	1.28
QUICK RATIO	1.11	1.66	0.94
TOTAL LIABILITIES TO EQUITY	1.81	0.88	2.94
LONG-TERM LIABILITIES TO EQUITY	0.90	0.48	0.73
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.50	0.45	0.70

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
2.00%	4.03%	2.34%	2.76%
28.18	31.17	27.01	22.71
15.50	16.36	12.69	9.33
7.45	0.90	5.16	10.64
53.13	52.46	47.20	45.44
13.98	9.84	11.94	9.07
3.98	4.10	3.58	2.73
10.00	5.74	8.36	6.34
71.64	72.42	69.93	73.87
41.17	38.72	30.83	34.83
30.47	33.70	39.10	39.04
5.24	6.19	2.99	2.79
2.83	3.29	1.42	0.92
2.41	2.90	1.57	1.87
42.88	42.34	49.03	47.25
3.99	5.20	3.77	7.31
100.00	100.00	100.00	100.00
11.82	11.06	7.33	2.64
14.08	15.57	15.47	12.10
7.19	9.88	6.86	5.52
33.09	36.51	29.66	20.26
33.41	31.73	32.10	20.48
66.50	68.24	61.76	40.74
33.50	31.76	38.24	59.26
100.00	100.00	100.00	100.00

1.61	1.44	1.59	2.42
1.14	0.99	1.16	1.78
1.99	2.15	1.62	0.69
1.00	1.00	0.84	0.35
0.57	0.53	0.44	0.47

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 63,700	$ 65,821	$ 29,037
Average assets per factory employee (Excluding Executives)	80,449	79,759	38,261
Average net worth per employee - All employees	22,196	36,441	7,242
Average gross plant investment per factory employee (Excluding Executives)	68,280	68,017	38,426
Net worth percentage of fixed assets	100.81%	119.33%	150.85%
EMPLOYEES			
Percent factory - All employees	83.90%	87.43%	78.64%
Percent administrative - All employees	8.26	6.96	11.91
Percent sales - All employees	7.84	5.61	9.45
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 105,874	$ 107,200	$ 94,132
Sales per factory employee	128,404	125,710	123,519
Sales less material per factory employee	67,377	72,975	66,861
Sales per administrative employee	1,478,600	1,628,108	776,211
EXCLUDING EXECUTIVES			
Sales per employee - All employees	113,073	112,963	101,498
Sales per factory employee	135,082	130,782	127,789
Sales less material per factory employee	70,944	75,841	69,185
SALES PER SALESMAN	2,327,268	3,415,057	841,667
SALES TO CURRENT ASSETS	387%	388%	450%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	31.72%	31.11%	31.82%
Factory payroll percentage of gross plant investment	57.95	51.72	76.27
Payroll per employee - All employees	$ 32,188	$ 32,028	$ 30,511
Payroll per factory employee	30,075	29,820	28,803
Payroll per administrative employee	36,906	42,444	33,575
Payroll per sales employee	54,098	59,986	45,156
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 25,182	$ 24,502	$ 24,226
Payroll per factory employee	24,040	23,176	24,172
Payroll per administrative employee	19,181	20,131	19,054
Payroll per sales employee	45,736	49,076	33,450
EXECUTIVE PAYROLL			
Payroll per executive - All executives	57,024	61,735	60,983
Payroll per factory executive	48,639	48,141	43,325
Payroll per administrative executive	76,760	93,605	76,698
Payroll per sales executive	67,130	65,111	81,694
RECEIVABLES			
Collection period	59.4	55.9	56.2
PROFIT			
Gross profit percentage of sales	15.92%	21.14%	20.39%
Average gross profit per factory employee	$ 22,077	$ 27,541	$ 27,996
Income before taxes percentage of sales	3.45%	12.00%	3.51%
Average income before taxes per employee	$ 3,863	$ 12,377	$ 4,137

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 52,437	$ 58,404	$ 72,183	$ 71,047
70,519	75,023	88,862	86,346
17,442	19,279	26,002	42,067
63,857	65,993	72,660	74,403
88.36%	103.61%	102.22%	134.42%
79.72%	81.39%	86.76%	87.80%
10.60	8.60	6.93	7.00
9.68	10.01	6.31	5.20
$ 89,688	$ 102,301	$ 114,535	$ 111,691
115,170	126,286	134,957	131,173
64,893	66,760	68,649	75,218
997,757	1,228,912	1,800,826	1,702,970
96,975	108,358	122,033	117,826
121,985	130,702	142,408	136,778
68,796	69,145	72,507	78,365
993,690	1,659,890	3,290,893	4,208,877
374%	385%	390%	378%
34.89%	31.42%	30.47%	30.22%
60.86	68.39	52.44	45.15
$ 30,590	$ 32,234	$ 32,953	$ 32,276
28,096	28,858	31,361	30,127
35,072	37,781	37,621	44,905
49,954	55,000	56,124	60,345
$ 24,038	$ 25,561	$ 25,610	$ 24,375
22,834	23,504	24,705	23,253
18,934	17,173	19,902	20,501
41,540	48,100	47,545	47,743
53,629	61,397	56,898	64,632
40,329	59,866	49,084	48,360
63,398	66,203	85,632	99,245
48,086	63,159	75,529	73,839
56.4	60.3	60.6	55.6
17.77%	17.03%	14.53%	20.63%
$ 22,880	$ 22,852	$ 21,143	$ 28,244
2.20%	2.45%	4.27%	12.41%
$ 1,985	$ 2,679	$ 5,002	$ 13,159

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES FROM $1.5 TO $5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 1.51	$ 1.53	$ 1.16
Receivables	15.67	14.83	14.68
Inventories	7.74	6.28	6.22
Marketable securities	1.35	4.15	0.13
Other current assets	2.03	2.83	0.29
	28.30	29.62	22.48
Plant Investment:			
Land and building	7.56	5.83	0.00
Machinery and equipment	42.72	44.72	28.45
Other fixed assets	2.29	1.81	2.15
	52.57	52.36	30.60
Non-Current Assets	2.77	3.97	0.02
TOTAL INVESTMENT	83.64	85.95	53.10
INVESTMENT TURNOVER PER $100 OF SALES	119.56%	116.35%	188.32%
EARNINGS			
Cost of Product	$84.08	$78.86	$79.61
Selling Expenses	5.37	4.01	6.48
Administrative Expenses	5.56	4.58	8.89
	95.01	87.45	94.98
Income Before Interest, Other Income, and Taxes	4.99	12.55	5.02
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	5.97%	14.60%	9.45%

** Sample insufficient for Profit Leaders.

SALES FROM $5 TO $10 MILLION**	SALES FROM $10 TO $20 MILLION**	SALES OVER $20 MILLION	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 1.10	$ 2.53	$ 1.39	$ 1.77
14.91	15.82	16.02	14.77
7.92	8.37	7.57	5.87
2.22	0.04	1.45	5.14
2.77	0.43	2.30	3.41
28.92	27.19	28.73	30.96
9.32	6.06	7.73	5.95
42.15	41.33	44.25	47.87
2.80	3.16	1.82	1.66
54.27	50.55	53.80	55.48
1.98	3.34	3.09	4.64
85.17	81.08	85.62	91.08
117.41%	123.33%	116.80%	109.79%
$82.23	$82.97	$85.47	$79.37
7.04	6.76	4.17	3.75
6.96	5.73	4.72	4.60
96.23	95.46	94.36	87.72
3.77	4.54	5.64	12.28
4.43%	5.60%	6.59%	13.48%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	44.65	40.82	46.82	42.52
FACTORY EXPENSES	24.34	21.60	25.27	23.91
TOTAL FACTORY COST OF PRODUCT	68.99	62.42	72.09	66.43
GROSS PROFIT	31.01	37.58	27.91	33.57
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	10.21	8.46	10.09	7.07
Selling expenses	11.27	8.65	7.97	5.44
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	21.48	17.11	18.06	12.51
INCOME BEFORE INTEREST EXPENSE	9.53	20.47	9.85	21.06
Interest expense	3.96	2.10	4.75	2.15
OPERATING INCOME	5.57	18.37	5.10	18.91
Other income	0.86	1.52	0.98	1.25
INCOME BEFORE INCOME TAXES	6.43	19.89	6.08	20.16

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	3.13%	2.27%	2.65%	2.28%
Direct wages	28.26	23.19	29.28	23.99
General factory salaries and wages	3.97	4.60	5.97	7.29
Packing, shipping and delivery wages	1.96	2.80	1.14	0.50
Payroll taxes	2.81	1.41	2.88	3.08
Employee benefits	4.52	6.55	4.90	5.38
TOTAL FACTORY PAYROLL	44.65	40.82	46.82	42.52
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.36	0.15	0.45	0.44
Depreciation - other	6.97	6.12	6.45	6.92
Taxes - real estate	0.45	0.63	0.32	0.29
Taxes - other	0.44	0.11	0.28	0.12
Insurance	0.77	0.29	0.57	0.35
Building rent	1.12	1.02	1.24	0.43
Utilities - heat, light, etc.	3.24	3.26	3.14	2.74
Equipment rental	1.01	0.21	1.39	0.29
Total Fixed Expenses	14.36	11.79	13.84	11.58
Other Expenses				
Factory supplies and expense	3.97	4.28	4.63	4.59
Packing, shipping and delivery expense	1.63	0.89	1.97	2.98
Repairs and maintenance	3.06	3.24	2.99	2.02
Other factory expenses	1.32	1.40	1.84	2.74
Total Other Expenses	9.98	9.81	11.43	12.33
TOTAL FACTORY EXPENSES	24.34	21.60	25.27	23.91
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.24	2.21	1.90	1.66
Salaries - office	2.23	1.65	2.43	1.91
Payroll taxes	0.31	0.16	0.31	0.24
Employee benefits	0.57	0.24	0.73	0.91
Bad debts	0.74	0.34	0.92	0.49
Office supplies and expenses	0.46	0.24	0.57	0.35
Professional fees	0.91	0.41	0.76	0.29
Taxes - business	0.05	0.01	0.16	0.07
Telephone	0.55	0.35	0.47	0.29
Other administrative expenses	2.15	2.85	1.84	0.86
TOTAL ADMINISTRATIVE EXPENSES	10.21	8.46	10.09	7.07
SELLING EXPENSES				
Salaries - executive	1.07	0.54	0.82	0.62
Salaries and commissions - salesmen	5.47	6.35	2.68	1.55
Salaries - sales office clerical	1.17	0.59	1.26	0.82
Payroll taxes	0.35	0.10	0.28	0.17
Employee benefits	0.35	0.18	0.39	0.25
Advertising	0.43	0.09	0.46	0.11
Travel and entertainment	0.95	0.27	1.04	0.51
Other selling expenses	1.48	0.53	1.04	1.41
TOTAL SELLING EXPENSES	11.27	8.65	7.97	5.44

REPORT ON OPERATIONS - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	35.80	33.06	31.98	26.13
Other chargeable materials	6.55	6.84	7.22	7.35
Outside services	6.42	5.73	3.78	2.31
TOTAL MATERIALS	48.77	45.63	42.98	35.79
FACTORY PAYROLL	22.92	22.16	26.46	27.52
FACTORY EXPENSES	12.39	11.52	14.43	15.25
TOTAL FACTORY COST OF PRODUCT	84.08	79.31	83.87	78.56
GROSS PROFIT	15.92	20.69	16.13	21.44
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	5.32	4.76	5.64	4.46
Selling expenses	5.89	4.77	4.43	3.50
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	11.21	9.53	10.07	7.96
INCOME BEFORE INTEREST EXPENSE	4.71	11.16	6.06	13.48
Interest expense	1.96	1.30	2.58	1.30
OPERATING INCOME	2.75	9.86	3.48	12.18
Other income	0.47	0.69	0.53	0.78
INCOME BEFORE INCOME TAXES	3.22	10.55	4.01	12.96

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS				
Ink	4.32%	4.70%	4.38%	3.42%
Film	0.59	0.58	0.72	0.91
Plates	0.80	0.66	0.96	1.06
Other chargeable materials	0.84	0.90	1.16	1.96
TOTAL OTHER CHARGEABLE MATERIALS	6.55	6.84	7.22	7.35
OUTSIDE SERVICES				
Composition	0.16	0.00	0.16	0.06
Offset preparation	0.95	0.63	0.76	0.58
Printing	1.87	1.97	0.68	0.32
Binding	2.21	2.21	1.32	0.42
Other outside services	1.23	0.92	0.86	0.93
TOTAL OUTSIDE SERVICES	6.42	5.73	3.78	2.31

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	1.63%	1.14%	1.53%	1.42%
Direct wages	14.49	12.85	16.43	15.67
General factory salaries and wages	2.04	2.29	3.37	4.65
Packing, shipping and delivery wages	1.01	1.58	0.64	0.30
Payroll taxes	1.44	0.76	1.68	1.99
Employee benefits	2.31	3.54	2.81	3.49
TOTAL FACTORY PAYROLL	22.92	22.16	26.46	27.52
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.18	0.09	0.26	0.29
Depreciation - other	3.53	3.16	3.73	4.45
Taxes - real estate	0.22	0.33	0.17	0.18
Taxes - other	0.23	0.04	0.16	0.08
Insurance	0.41	0.15	0.31	0.22
Building rent	0.57	0.57	0.67	0.30
Utilities - heat, light, etc.	1.64	1.68	1.80	1.75
Equipment rental	0.48	0.12	0.80	0.18
Total Fixed Expenses	7.26	6.14	7.90	7.45
Other Expenses				
Factory supplies and expense	2.03	2.32	2.67	2.98
Packing, shipping and delivery expense	0.82	0.49	1.11	1.84
Repairs and maintenance	1.57	1.77	1.68	1.27
Other factory expenses	0.71	0.80	1.07	1.71
Total Other Expenses	5.13	5.38	6.53	7.80
TOTAL FACTORY EXPENSES	12.39	11.52	14.43	15.25
ADMINISTRATIVE EXPENSES				
Salaries - executive	1.19	1.25	1.08	1.05
Salaries - office	1.16	0.92	1.35	1.20
Payroll taxes	0.16	0.09	0.18	0.15
Employee benefits	0.30	0.13	0.42	0.60
Bad debts	0.37	0.18	0.51	0.30
Office supplies and expenses	0.24	0.13	0.31	0.22
Professional fees	0.46	0.23	0.42	0.18
Taxes - business	0.03	0.00	0.09	0.04
Telephone	0.28	0.19	0.26	0.18
Other administrative expenses	1.13	1.64	1.02	0.54
TOTAL ADMINISTRATIVE EXPENSES	5.32	4.76	5.64	4.46
SELLING EXPENSES				
Salaries - executive	0.54	0.27	0.45	0.38
Salaries and commissions - salesmen	2.88	3.55	1.46	0.95
Salaries - sales office clerical	0.59	0.31	0.70	0.51
Payroll taxes	0.18	0.05	0.16	0.10
Employee benefits	0.18	0.10	0.22	0.16
Advertising	0.23	0.05	0.26	0.07
Travel and entertainment	0.49	0.14	0.56	0.33
Other selling expenses	0.80	0.30	0.62	1.00
TOTAL SELLING EXPENSES	5.89	4.77	4.43	3.50

BALANCE SHEET

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	2.37%	0.21%	2.59%	4.02%
Receivables	29.90	27.03	27.06	22.53
Inventories	14.77	11.16	12.18	10.00
Other current assets	3.03	1.47	7.50	13.63
TOTAL CURRENT ASSETS	50.07	39.87	49.33	50.18
FIXED ASSETS				
Real estate	10.05	3.96	11.82	13.22
Less: Accumulated depreciation	3.39	2.08	2.95	2.96
	6.66	1.88	8.87	10.26
Machinery and equipment	70.72	81.65	72.95	64.39
Less: Accumulated depreciation	35.51	35.41	35.26	30.05
	35.21	46.24	37.69	34.34
Other fixed assets	5.07	5.90	3.93	1.12
Less: Accumulated depreciation	2.53	2.49	2.34	0.64
	2.54	3.41	1.59	0.48
NET FIXED ASSETS	44.41	51.53	48.15	45.08
OTHER ASSETS	5.52	8.60	2.52	4.74
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	8.01	2.72	10.85	3.88
Accounts payable	15.54	18.15	16.62	9.03
Other current liabilities	8.08	4.73	6.49	5.80
TOTAL CURRENT LIABILITIES	31.63	25.60	33.96	18.71
LONG-TERM LIABILITIES	30.11	22.53	33.61	27.25
TOTAL LIABILITIES	61.74	48.13	67.57	45.96
SHAREHOLDERS' AND PROPRIETORS' EQUITY	38.26	51.87	32.43	54.04
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.58	1.56	1.45	2.68
QUICK RATIO	1.12	1.12	1.09	2.15
TOTAL LIABILITIES TO EQUITY	1.61	0.93	2.08	0.85
LONG-TERM LIABILITIES TO EQUITY	0.79	0.43	1.04	0.50
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.50	0.43	0.48	0.47

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 70,015	$ 82,722	$ 56,261	$ 54,554
Average assets per factory employee (Excluding Executives)	90,649	105,720	66,991	62,452
Average net worth per employee - All employees	26,614	44,896	17,737	30,805
Average gross plant investment per factory employee (Excluding Executives)	74,776	94,878	58,632	50,109
Net worth percentage of fixed assets	101.48%	104.96%	89.53%	128.92%
EMPLOYEES				
Percent factory - All employees	82.20%	83.24%	86.29%	90.22%
Percent administrative - All employees	8.70	8.21	7.79	6.13
Percent sales - All employees	9.10	8.55	5.92	3.65
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 119,881	$ 140,392	$ 89,639	$ 85,073
Sales per factory employee	147,756	171,914	104,775	94,906
Sales less material per factory employee	73,672	92,042	58,702	60,263
Sales per administrative employee	1,563,868	1,944,360	1,286,157	1,417,274
EXCLUDING EXECUTIVES				
Sales per employee - All employees	128,418	148,410	94,632	89,332
Sales per factory employee	156,041	179,311	108,532	98,430
Sales less material per factory employee	77,895	95,937	60,880	62,444
SALES PER SALESMAN	1,681,936	2,117,167	3,292,627	4,193,790
SALES TO CURRENT ASSETS	407%	449%	380%	348%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	30.10%	28.83%	32.49%	32.63%
Factory payroll percentage of gross plant investment	59.92	41.19	55.39	58.74
Payroll per employee - All employees	$ 34,227	$ 38,843	$ 28,820	$ 27,485
Payroll per factory employee	31,846	36,285	27,233	25,510
Payroll per administrative employee	36,398	43,193	36,009	41,945
Payroll per sales employee	57,350	71,286	50,426	52,452
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 27,069	$ 30,403	$ 22,513	$ 20,568
Payroll per factory employee	25,668	28,236	21,939	19,802
Payroll per administrative employee	18,414	20,057	19,191	20,181
Payroll per sales employee	50,906	66,744	40,094	37,297
EXECUTIVE PAYROLL				
Payroll per executive - All executives	59,098	70,512	56,713	55,884
Payroll per factory executive	48,621	58,074	51,173	41,518
Payroll per administrative executive	79,994	97,269	74,356	91,162
Payroll per sales executive	64,583	44,095	68,882	79,122
RECEIVABLES				
Collection period	59.3	60.4	58.0	52.8
PROFIT				
Gross profit percentage of sales	15.92%	20.69%	16.13%	21.44%
Average gross profit per factory employee	$ 25,437	$ 37,306	$ 17,448	$ 21,031
Income before taxes percentage of sales	3.22%	10.55%	4.01%	12.96%
Average income before taxes per employee	$ 4,335	$ 14,694	$ 3,601	$ 10,833

RETURN ON INVESTMENT - PER $100 OF SALES

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 1.43	$ 0.15	$ 1.44	$ 2.45
Receivables	15.68	16.18	15.16	13.94
Inventories	7.49	6.42	7.08	6.18
Marketable securities	0.36	0.11	2.09	6.85
Other current assets	1.42	0.76	3.40	4.21
	26.38	23.62	29.17	33.63
Plant Investment:				
Land and building	6.23	2.36	7.95	8.13
Machinery and equipment	40.24	48.35	45.32	42.31
Other fixed assets	2.60	3.34	2.19	0.78
	49.07	54.05	55.46	51.22
Non-Current Assets	3.94	5.07	1.74	3.24
TOTAL INVESTMENT	79.39	82.74	86.37	88.09
INVESTMENT TURNOVER PER $100 OF SALES	125.96%	120.86%	115.78%	113.52%
EARNINGS				
Cost of Product	$84.08	$79.31	$83.87	$78.56
Selling Expenses	5.89	4.77	4.43	3.50
Administrative Expenses	5.32	4.76	5.64	4.46
	95.29	88.84	93.94	86.52
Income Before Interest, Other Income, and Taxes	4.71	11.16	6.06	13.48
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	5.93%	13.49%	7.02%	15.30%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	46.89	46.10	39.06
FACTORY EXPENSES	24.36	24.82	22.84
TOTAL FACTORY COST OF PRODUCT	71.25	70.92	61.90
GROSS PROFIT	28.75	29.08	38.10
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	11.47	9.23	9.41
Selling expenses	11.25	8.01	6.24
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	22.72	17.24	15.65
INCOME BEFORE INTEREST EXPENSE	6.03	11.84	22.45
Interest expense	4.23	3.94	3.33
OPERATING INCOME	1.80	7.90	19.12
Other income	1.09	1.25	0.20
INCOME BEFORE INCOME TAXES	2.89	9.15	19.32

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X
X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%
47.64	34.74	46.34	48.25	48.11
26.13	29.72	25.84	27.93	19.33
73.77	64.46	72.18	76.18	67.44
26.23	35.54	27.82	23.82	32.56
10.87	9.55	8.86	8.02	5.55
8.61	6.02	5.85	6.31	6.31
19.48	15.57	14.71	14.33	11.86
6.75	19.97	13.11	9.49	20.70
4.35	1.96	3.39	3.41	0.15
2.40	18.01	9.72	6.08	20.55
1.63	3.61	1.87	0.94	0.36
4.03	21.62	11.56	7.02	20.91

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL			
Salaries - executive	3.04%	2.95%	3.39%
Direct wages	29.80	27.06	17.37
General factory salaries and wages	4.57	5.21	6.74
Packing, shipping and delivery wages	1.16	2.73	3.16
Payroll taxes	2.85	3.29	2.80
Employee benefits	5.47	4.86	5.60
TOTAL FACTORY PAYROLL	46.89	46.10	39.06
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.43	0.31	0.28
Depreciation - other	6.67	7.34	6.23
Taxes - real estate	0.34	0.50	0.47
Taxes - other	0.28	0.49	0.01
Insurance	0.82	0.50	0.30
Building rent	1.43	0.71	0.46
Utilities - heat, light, etc.	2.68	3.58	3.17
Equipment rental	1.00	1.27	0.50
Total Fixed Expenses	13.65	14.70	11.42
Other Expenses			
Factory supplies and expense	4.88	4.33	6.03
Packing, shipping and delivery expense	1.67	1.25	0.94
Repairs and maintenance	2.75	2.99	2.72
Other factory expenses	1.41	1.55	1.73
Total Other Expenses	10.71	10.12	11.42
TOTAL FACTORY EXPENSES	24.36	24.82	22.84
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.61	1.91	1.64
Salaries - office	1.91	2.52	2.28
Payroll taxes	0.33	0.36	0.29
Employee benefits	0.74	0.48	0.33
Bad debts	0.85	0.75	0.86
Office supplies and expenses	0.59	0.52	0.50
Professional fees	0.83	0.50	0.23
Taxes - business	0.14	0.06	0.09
Telephone	0.59	0.41	0.18
Other administrative expenses	2.88	1.72	3.01
TOTAL ADMINISTRATIVE EXPENSES	11.47	9.23	9.41
SELLING EXPENSES			
Salaries - executive	1.02	0.69	0.78
Salaries and commissions - salesmen	5.05	4.14	4.34
Salaries - sales office clerical	1.63	1.07	0.38
Payroll taxes	0.40	0.28	0.13
Employee benefits	0.59	0.26	0.17
Advertising	0.43	0.30	0.00
Travel and entertainment	0.98	0.74	0.35
Other selling expenses	1.15	0.53	0.09
TOTAL SELLING EXPENSES	11.25	8.01	6.24

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
3.25%	2.44%	1.98%	2.66%	1.30%
30.96	22.40	24.33	30.21	33.00
4.09	2.40	11.44	5.03	4.85
1.48	0.81	1.09	1.25	0.22
2.77	2.42	3.09	3.54	3.46
5.09	4.27	4.41	5.56	5.28
47.64	34.74	46.34	48.25	48.11
0.31	0.41	0.59	0.68	0.51
7.45	7.65	6.25	7.11	6.82
0.46	0.31	0.17	0.45	0.31
0.32	0.15	0.47	0.43	0.10
0.73	0.68	0.56	0.40	0.19
1.23	1.62	0.16	0.49	0.89
3.25	3.09	3.25	4.21	2.76
0.60	0.39	0.28	2.79	0.02
14.35	14.30	11.73	16.56	11.60
4.02	2.89	4.90	4.90	4.42
2.58	5.97	2.99	0.83	0.64
3.48	2.73	2.92	3.70	1.62
1.70	3.83	3.30	1.94	1.05
11.78	15.42	14.11	11.37	7.73
26.13	29.72	25.84	27.93	19.33
1.95	3.50	1.46	1.81	1.17
2.44	1.73	3.06	2.02	1.64
0.22	0.23	0.26	0.38	0.23
0.67	1.28	0.41	0.70	1.00
0.68	(0.12)	0.33	0.49	0.06
0.47	0.31	0.31	0.18	0.15
1.44	0.98	0.58	0.85	0.15
0.03	0.09	0.03	0.08	0.00
0.51	0.39	0.70	0.29	0.19
2.46	1.16	1.72	1.22	0.96
10.87	9.55	8.86	8.02	5.55
1.27	1.10	0.49	0.63	0.10
3.01	0.87	2.13	1.83	1.02
1.16	1.97	0.97	0.70	0.58
0.29	0.26	0.17	0.21	0.12
0.28	0.33	0.36	0.28	0.17
0.30	0.08	0.24	0.36	0.28
0.97	0.41	0.78	0.61	0.43
1.33	1.00	0.71	1.69	3.61
8.61	6.02	5.85	6.31	6.31

REPORT ON OPERATIONS - SALES = 100%

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	36.47	36.50	31.03
Other chargeable materials	5.96	6.84	6.42
Outside services	5.51	4.72	2.91
TOTAL MATERIALS	47.94	48.06	40.36
FACTORY PAYROLL	24.20	23.90	23.31
FACTORY EXPENSES	12.52	12.90	13.69
TOTAL FACTORY COST OF PRODUCT	84.66	84.86	77.36
GROSS PROFIT	15.34	15.14	22.64
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	6.04	4.81	5.56
Selling expenses	5.94	4.19	3.68
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	11.98	9.00	9.24
INCOME BEFORE INTEREST EXPENSE	3.36	6.14	13.40
Interest expense	2.17	1.96	1.96
OPERATING INCOME	1.19	4.18	11.44
Other income	0.59	0.69	0.14
INCOME BEFORE INCOME TAXES	1.78	4.87	11.58

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS			
Ink	3.70%	4.16%	2.77%
Film	0.71	0.53	0.67
Plates	0.78	0.93	0.78
Other chargeable materials	0.77	1.22	2.20
TOTAL OTHER CHARGEABLE MATERIALS	5.96	6.84	6.42
OUTSIDE SERVICES			
Composition	0.28	0.07	0.00
Offset preparation	0.80	0.96	0.39
Printing	1.05	0.71	0.49
Binding	2.07	1.13	0.76
Other outside services	1.31	1.85	1.27
TOTAL OUTSIDE SERVICES	5.51	4.72	2.91

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%
33.44	29.97	24.95	20.75	17.72
6.89	7.11	6.81	10.06	9.18
5.78	5.04	4.33	2.44	2.45
46.11	42.12	36.09	33.25	29.35
25.58	20.05	29.64	32.32	34.09
13.98	17.29	16.53	18.38	13.69
85.67	79.46	82.26	83.95	77.13
14.33	20.54	17.74	16.05	22.87
5.76	5.49	5.68	5.31	3.90
4.54	3.44	3.73	4.18	4.41
10.30	8.93	9.41	9.49	8.31
4.03	11.61	8.33	6.56	14.56
2.18	1.15	2.18	2.19	0.10
1.85	10.46	6.15	4.37	14.46
0.84	2.10	1.18	0.67	0.25
2.69	12.56	7.33	5.04	14.71

4.48%	4.47%	3.21%	5.92%	7.44%
0.57	0.52	0.52	0.52	0.62
0.92	1.04	1.09	0.88	0.96
0.92	1.08	1.99	2.74	0.16
6.89	7.11	6.81	10.06	9.18
0.11	0.00	0.02	0.06	0.25
0.89	1.55	2.60	0.23	0.00
0.73	1.77	0.64	0.43	0.17
3.14	0.89	0.82	0.54	0.51
0.91	0.83	0.25	1.18	1.52
5.78	5.04	4.33	2.44	2.45

SUPPORTING SCHEDULES - SALES = 100%

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL			
Salaries - executive	1.60%	1.57%	2.04%
Direct wages	15.27	13.87	10.27
General factory salaries and wages	2.41	2.75	4.10
Packing, shipping and delivery wages	0.59	1.43	1.84
Payroll taxes	1.45	1.72	1.67
Employee benefits	2.88	2.56	3.39
TOTAL FACTORY PAYROLL	24.20	23.90	23.31
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.21	0.16	0.17
Depreciation - other	3.39	3.89	3.72
Taxes - real estate	0.17	0.26	0.28
Taxes - other	0.14	0.27	0.01
Insurance	0.43	0.26	0.18
Building rent	0.75	0.36	0.27
Utilities - heat, light, etc.	1.36	1.89	1.88
Equipment rental	0.48	0.58	0.31
Total Fixed Expenses	6.93	7.67	6.82
Other Expenses			
Factory supplies and expense	2.56	2.28	3.65
Packing, shipping and delivery expense	0.83	0.62	0.57
Repairs and maintenance	1.43	1.53	1.61
Other factory expenses	0.77	0.80	1.04
Total Other Expenses	5.59	5.23	6.87
TOTAL FACTORY EXPENSES	12.52	12.90	13.69
ADMINISTRATIVE EXPENSES			
Salaries - executive	1.40	1.02	0.98
Salaries - office	0.97	1.31	1.34
Payroll taxes	0.17	0.18	0.17
Employee benefits	0.39	0.25	0.20
Bad debts	0.45	0.38	0.52
Office supplies and expenses	0.31	0.27	0.30
Professional fees	0.42	0.25	0.14
Taxes - business	0.07	0.03	0.06
Telephone	0.31	0.21	0.11
Other administrative expenses	1.55	0.91	1.74
TOTAL ADMINISTRATIVE EXPENSES	6.04	4.81	5.56
SELLING EXPENSES			
Salaries - executive	0.53	0.36	0.47
Salaries and commissions - salesmen	2.70	2.18	2.55
Salaries - sales office clerical	0.85	0.56	0.23
Payroll taxes	0.21	0.14	0.07
Employee benefits	0.32	0.14	0.10
Advertising	0.22	0.15	0.00
Travel and entertainment	0.50	0.39	0.21
Other selling expenses	0.61	0.27	0.05
TOTAL SELLING EXPENSES	5.94	4.19	3.68

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
1.79%	1.41%	1.28%	1.72%	0.89%
16.58	12.96	15.60	20.35	23.43
2.09	1.39	7.27	3.38	3.40
0.82	0.46	0.71	0.80	0.15
1.53	1.40	1.98	2.37	2.44
2.77	2.43	2.80	3.70	3.78
25.58	20.05	29.64	32.32	34.09
0.16	0.24	0.38	0.45	0.36
3.95	4.47	4.00	4.76	4.85
0.23	0.18	0.11	0.30	0.22
0.19	0.09	0.30	0.29	0.07
0.40	0.39	0.36	0.26	0.14
0.68	0.89	0.10	0.34	0.66
1.74	1.77	2.08	2.77	1.93
0.31	0.21	0.18	1.72	0.01
7.66	8.24	7.51	10.89	8.24
2.14	1.62	3.15	3.23	3.17
1.40	3.60	1.90	0.55	0.43
1.81	1.52	1.87	2.43	1.10
0.97	2.31	2.10	1.28	0.75
6.32	9.05	9.02	7.49	5.45
13.98	17.29	16.53	18.38	13.69
1.04	1.99	0.93	1.20	0.82
1.31	1.00	1.96	1.32	1.15
0.12	0.13	0.17	0.25	0.16
0.38	0.77	0.26	0.48	0.73
0.35	(0.07)	0.21	0.32	0.05
0.24	0.19	0.20	0.12	0.10
0.75	0.55	0.37	0.57	0.10
0.02	0.05	0.02	0.05	0.00
0.27	0.22	0.45	0.19	0.14
1.28	0.66	1.11	0.81	0.65
5.76	5.49	5.68	5.31	3.90
0.66	0.63	0.32	0.42	0.07
1.57	0.49	1.35	1.19	0.68
0.64	1.14	0.62	0.46	0.39
0.16	0.15	0.11	0.13	0.08
0.15	0.19	0.23	0.18	0.11
0.17	0.04	0.16	0.23	0.19
0.48	0.24	0.49	0.40	0.30
0.71	0.56	0.45	1.17	2.59
4.54	3.44	3.73	4.18	4.41

BALANCE SHEET

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
ASSETS			
CURRENT ASSETS			
Cash	2.46%	2.19%	3.87%
Receivables	29.74	28.86	25.80
Inventories	18.09	12.09	10.34
Other current assets	4.56	1.84	0.67
TOTAL CURRENT ASSETS	54.85	44.98	40.68
FIXED ASSETS			
Real estate	8.08	10.43	9.87
Less: Accumulated depreciation	2.59	3.10	1.21
	5.49	7.33	8.66
Machinery and equipment	68.97	77.18	64.64
Less: Accumulated depreciation	34.62	36.29	26.89
	34.35	40.89	37.75
Other fixed assets	5.70	4.17	1.70
Less: Accumulated depreciation	3.18	2.19	0.52
	2.52	1.98	1.18
NET FIXED ASSETS	42.36	50.20	47.59
OTHER ASSETS	2.79	4.82	11.73
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	12.49	10.04	4.83
Accounts payable	15.92	16.19	11.71
Other current liabilities	7.66	6.04	5.84
TOTAL CURRENT LIABILITIES	36.07	32.27	22.38
LONG-TERM LIABILITIES	35.34	27.17	25.15
TOTAL LIABILITIES	71.41	59.44	47.53
SHAREHOLDERS' AND PROPRIETORS' EQUITY	28.59	40.56	52.47
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.52	1.39	1.82
QUICK RATIO	1.02	1.02	1.36
TOTAL LIABILITIES TO EQUITY	2.50	1.47	0.91
LONG-TERM LIABILITIES TO EQUITY	1.24	0.67	0.48
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.50	0.47	0.42

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
3.68%	5.13%	0.20%	2.66%	1.34%
28.28	25.59	24.93	19.89	16.83
9.24	5.95	9.23	8.33	9.01
7.26	16.31	0.45	14.38	24.56
48.46	52.98	34.81	45.26	51.74
9.36	6.38	17.31	17.35	12.05
2.58	2.59	5.05	6.74	2.94
6.78	3.79	12.26	10.61	9.11
66.49	70.89	88.36	78.20	64.65
30.63	29.69	43.07	37.31	29.89
35.86	41.20	45.29	40.89	34.76
2.23	2.41	0.00	4.12	2.07
1.21	1.58	0.00	2.35	0.88
1.02	0.83	0.00	1.77	1.19
43.66	45.82	57.55	53.27	45.06
7.88	1.20	7.64	1.47	3.20
100.00	100.00	100.00	100.00	100.00
5.65	4.22	3.93	5.61	1.22
13.58	11.48	10.47	9.35	5.78
8.57	5.39	5.49	6.38	4.33
27.80	21.09	19.89	21.34	11.33
36.41	29.80	39.49	30.15	15.52
64.21	50.89	59.38	51.49	26.85
35.79	49.11	40.62	48.51	73.15
100.00	100.00	100.00	100.00	100.00
1.74	2.51	1.75	2.12	4.57
1.41	2.23	1.29	1.73	3.77
1.79	1.04	1.46	1.06	0.37
1.02	0.61	0.97	0.62	0.21
0.46	0.42	0.49	0.48	0.46

SIGNIFICANT FACTS

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Average assets per employee - All employees	$ 60,956	$ 57,433	$ 59,026
Average assets per factory employee (Excluding Executives)	76,535	72,994	80,205
Average net worth per employee - All employees	17,068	24,978	37,326
Average gross plant investment per factory employee (Excluding Executives)	62,193	66,535	63,123
Net worth percentage of fixed assets	105.52%	81.72%	113.82%
EMPLOYEES			
Percent factory - All employees	82.59%	84.45%	83.48%
Percent administrative - All employees	8.07	8.35	8.99
Percent sales - All employees	9.34	7.20	7.53
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 107,210	$ 109,085	$ 111,281
Sales per factory employee	130,326	132,028	141,252
Sales less material per factory employee	66,641	67,245	83,467
Sales per administrative employee	1,510,201	1,468,009	1,340,139
EXCLUDING EXECUTIVES			
Sales per employee - All employees	114,630	115,682	118,972
Sales per factory employee	136,196	138,538	149,986
Sales less material per factory employee	69,791	70,578	88,650
SALES PER SALESMAN	2,204,812	1,746,634	1,592,034
SALES TO CURRENT ASSETS	379%	460%	510%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	31.74%	30.05%	29.42%
Factory payroll percentage of gross plant investment	63.36	52.90	65.05
Payroll per employee - All employees	$ 33,201	$ 31,659	$ 32,530
Payroll per factory employee	30,618	30,101	31,414
Payroll per administrative employee	38,352	35,516	34,878
Payroll per sales employee	56,338	53,667	68,267
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 25,663	$ 25,009	$ 25,040
Payroll per factory employee	24,300	24,051	24,019
Payroll per administrative employee	18,156	20,555	18,831
Payroll per sales employee	48,876	43,072	47,007
EXECUTIVE PAYROLL			
Payroll per executive - All executives	57,245	55,048	52,229
Payroll per factory executive	52,047	48,787	41,874
Payroll per administrative executive	67,578	77,102	100,228
Payroll per sales executive	63,067	67,734	94,684
RECEIVABLES			
Collection period	58.0	56.6	49.1
PROFIT			
Gross profit percentage of sales	15.34%	15.14%	22.64%
Average gross profit per factory employee	$ 21,133	$ 22,026	$ 35,757
Income before taxes percentage of sales	1.78%	4.87%	11.58%
Average income before taxes per employee	$ 2,165	$ 5,430	$ 12,535

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 85,385	$ 77,983	$ 56,023	$ 62,330	$ 61,299
111,069	94,212	65,118	71,424	67,367
29,531	37,251	23,749	28,172	44,770
85,352	77,150	67,361	69,225	53,375
98.34%	121.71%	73.79%	112.37%	175.98%
83.52%	86.23%	88.64%	90.16%	92.84%
8.31	6.76	7.30	6.68	5.50
8.17	7.01	4.06	3.16	1.66
$ 117,657	$ 114,810	$ 92,142	$ 75,992	$ 73,591
145,807	133,459	103,841	84,790	79,646
77,199	76,475	66,160	55,977	55,728
1,613,821	1,737,386	1,300,271	1,228,911	1,349,444
126,866	122,006	95,952	80,145	76,014
155,276	138,669	107,332	88,098	81,426
82,325	79,488	68,413	58,088	56,928
2,449,725	5,486,433	5,895,368	2,832,756	3,947,665
342%	300%	482%	318%	257%
31.61%	26.55%	35.60%	37.96%	38.26%
57.99	38.39	47.03	44.70	55.58
$ 35,768	$ 30,630	$ 32,476	$ 28,181	$ 27,909
34,433	26,822	30,390	26,587	26,671
40,066	67,965	42,965	39,552	38,614
43,305	42,662	59,990	55,886	33,336
$ 27,911	$ 21,182	$ 26,022	$ 21,466	$ 21,982
27,719	20,373	24,911	20,794	21,531
19,458	22,814	27,812	19,452	18,713
34,527	31,021	48,826	48,115	30,008
59,502	84,604	64,502	65,137	48,994
42,524	52,628	39,596	60,077	45,812
73,752	152,705	111,853	89,707	59,675
68,246	75,831	94,556	37,707	15,841
66.6	64.6	58.0	57.2	53.3
14.33%	20.54%	17.74%	16.05%	22.87%
$ 24,280	$ 28,372	$ 19,407	$ 13,872	$ 18,757
2.69%	12.56%	7.33%	5.04%	14.71%
$ 3,649	$ 14,077	$ 7,285	$ 3,540	$ 10,841

RETURN ON INVESTMENT - PER $100 OF SALES

	0% TO 11%**	11% TO 21%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Current Assets:			
Cash	$ 1.47	$ 1.24	$ 2.04
Receivables	15.23	14.91	12.82
Inventories	9.44	6.51	5.26
Marketable securities	0.14	0.82	0.00
Other current assets	2.46	0.44	0.36
	28.74	23.92	20.48
Plant Investment:			
Land and building	5.33	5.61	4.78
Machinery and equipment	38.06	42.42	34.51
Other fixed assets	2.58	2.40	0.98
	45.97	50.43	40.27
Non-Current Assets	1.82	2.61	6.75
TOTAL INVESTMENT	76.53	76.96	67.50
INVESTMENT TURNOVER PER $100 OF SALES	130.67%	129.94%	148.15%
EARNINGS			
Cost of Product	$84.66	$84.86	$77.36
Selling Expenses	5.94	4.19	3.68
Administrative Expenses	6.04	4.81	5.56
	96.64	93.86	86.60
Income Before Interest, Other Income, and Taxes	3.36	6.14	13.40
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	4.39%	7.98%	19.85%

** Sample insufficient for Profit Leaders.

21% TO 41%		41% TO 61%**	OVER 61%	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 2.24	$ 3.23	$ 0.13	$ 2.11	$ 1.23
17.71	17.35	14.98	15.19	14.37
6.01	4.02	5.53	6.38	7.08
1.58	8.71	0.01	8.49	11.82
3.08	1.47	0.26	4.21	11.25
30.62	34.78	20.91	36.38	45.75
7.56	4.14	10.35	13.07	9.10
47.46	48.01	52.62	62.23	53.16
1.49	1.61	0.00	3.11	1.56
56.51	53.76	62.97	78.41	63.82
6.63	0.82	4.90	1.35	2.92
93.76	89.36	88.78	116.14	112.49
106.66%	111.91%	112.64%	86.10%	88.90%
$85.67	$79.46	$82.26	$83.95	$77.13
4.54	3.44	3.73	4.18	4.41
5.76	5.49	5.68	5.31	3.90
95.97	88.39	91.67	93.44	85.44
4.03	11.61	8.33	6.56	14.56
4.30%	12.99%	9.38%	5.65%	12.94%

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL FIRMS	59	$ 23,473,000	$ 35,231,000	$ 1,747,000
TOTAL - PROFIT LEADERS*	10	41,249,000	63,327,000	7,475,000
BY SIZE OF FIRM				
ALL FIRMS				
$1,500,000-$5,000,000	2	1,604,000	4,686,000	155,000
$5,000,000-$10,000,000	14	4,472,000	7,712,000	198,000
$10,000,000-$20,000,000	10	8,379,000	14,902,000	274,000
Over $20,000,000	33	37,434,000	54,918,000	2,947,000
PROFIT LEADERS				
Over $20,000,000	8	50,307,000	76,690,000	9,086,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Commercial and Advertising	30	14,561,000	24,374,000	809,000
Magazine and Periodical	22	37,071,000	51,265,000	3,410,000
PROFIT LEADERS				
Commercial and Advertising	4	17,429,000	29,074,000	3,057,000
Magazine and Periodical	6	57,129,000	86,162,000	10,420,000
BY PERCENTAGE OF PAPER SUPPLIED				
ALL FIRMS				
0% To 11%	20	18,695,000	31,418,000	600,000
11% To 21%	10	15,136,000	28,942,000	1,696,000
21% To 41%	11	17,282,000	23,249,000	708,000
41% To 61%	2	108,264,000	171,749,000	16,265,000
Over 61%	6	62,317,000	67,394,000	4,236,000
PROFIT LEADERS				
11% To 21%	3	17,734,000	31,796,000	3,928,000
21% To 41%	2	20,548,000	30,311,000	3,729,000
Over 61%	2	54,379,000	71,680,000	10,622,000

---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See explanatory note on page 43.

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

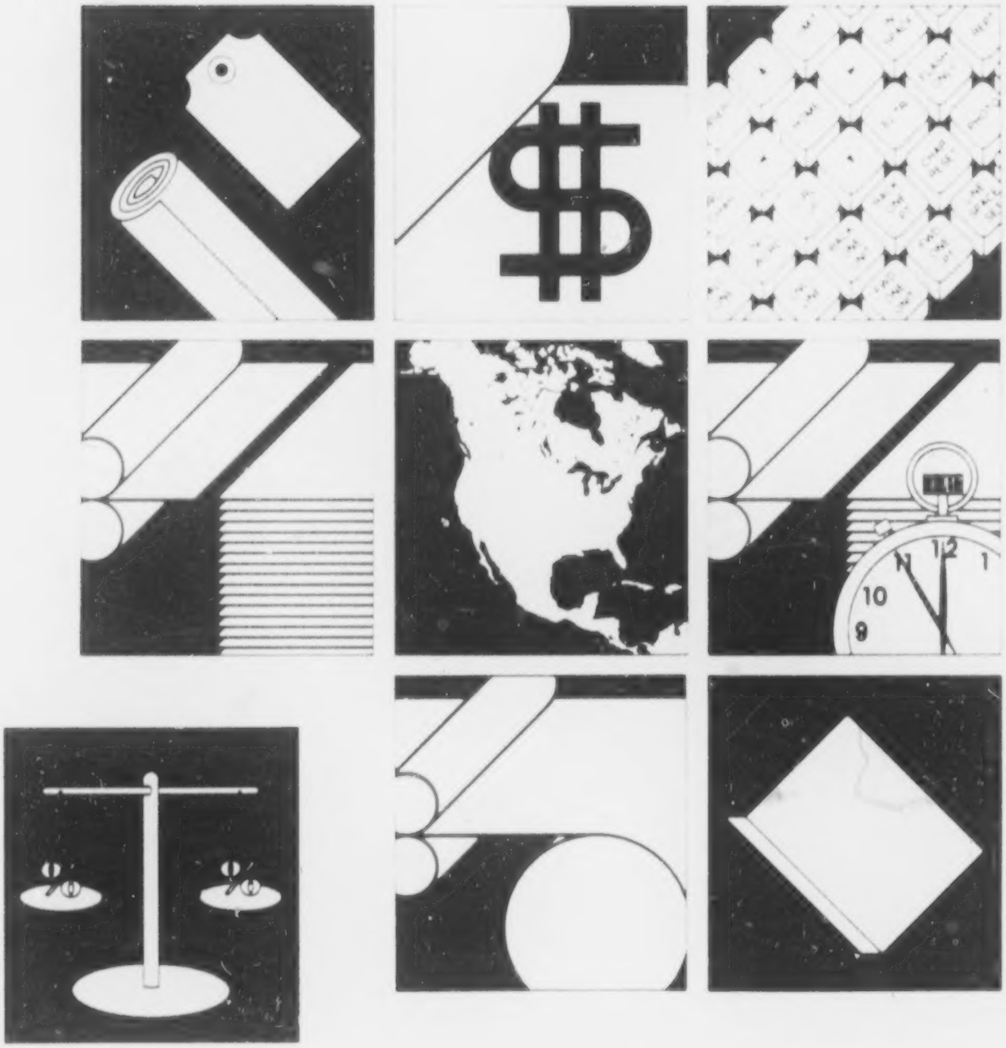
The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	

62.2% divided by 3 = 20.7%

A8740-1.7 U
10/87

1987 Financial Ratio Study



Volume VII

Web Offset Printers—Non-Heatset

1987
FINANCIAL
RATIO STUDY

Volume VII: Web Offset Printers—Non-Heatset

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume,* and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset,* respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 43 Non-Heatset Web Offset Printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales to $1.5 million, sales from $1.5 to $5 million, etc.; and by product specialty - for example, Commercial and Advertising, Newspaper, etc. Readers can compare their firm's operations with other firms having the same sales volume or product specialty in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H R Margolis Company

H. R. MARGOLIS COMPANY

Table of Contents

Page Number

FOREWORD 2

VALUE ADDED -- WHAT IT MEANS TO YOU 4- 5

CHAPTER 1 - BY SIZE OF FIRM 6-19
  Report on Operations - Value Added = 100% 6- 7
  Supporting Schedules - Value Added = 100% 8- 9
  Report on Operations - Sales = 100% 10-11
  Supporting Schedules - Sales = 100% 10-13
  Balance Sheet 14-15
  Significant Facts 16-17
  Return on Investment - Per $100 of Sales 18-19

CHAPTER 2 - BY PRODUCT SPECIALTY 20-33
  Report on Operations - Value Added = 100% 20-21
  Supporting Schedules - Value Added = 100% 22-23
  Report on Operations - Sales = 100% 24-25
  Supporting Schedules - Sales = 100% 24-27
  Balance Sheet 28-29
  Significant Facts 30-31
  Return on Investment - Per $100 of Sales 32-33

ABSOLUTE DATA 34

Congratulations on partaking of the web offset ratio study program. I'm sure that as you review the wealth of information contained in the book that you will find it to be a very rewarding exercise.

Ten years ago PIA formed a special section for non-heatset web offset printers. The activities of the Non-Heatset Web Unit have increased significantly.

Our publication *SNAP* (Specifications for Non-Heat Advertising printing), published in October, 1984, includes pigmentation standards for process inks, recommended ink film densities, screen rulings, stock brightness, opacity and hue standards, type, reverses and proofing standards. It is printed on three types of stock. These are being up-dated in 1987. In addition, we publish the *Non-Heatset Web Offset Directory* which lists non-heatset web offset printers in the United States and Canada. In conjunction with the Web Offset Section, we publish the *Market Outlook For Web Offset Printers, A Waste and Spoilage Report* and a *Product Catalog*, which include both non-heatset and heatset printers.

Our Graphic Arts Awards Competition for non-heatset printers is held in conjunction with the Annual Meeting. This year's Annual Meeting will be held November 8-11, 1987, Hotel Inter-Continental, Hilton Head Island, SC.

Edward W. Hill, Jr.
Executive Director
Non-Heatset Unit

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	42.89	35.31	59.82
FACTORY EXPENSES	23.73	22.63	40.87
TOTAL FACTORY COST OF PRODUCT	66.62	57.94	100.69
GROSS PROFIT (LOSS)	33.38	42.06	(0.69)
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	14.37	12.55	11.07
Selling expenses	10.74	11.43	4.70
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	25.11	23.98	15.77
INCOME (LOSS) BEFORE INTEREST EXPENSE	8.27	18.08	(16.46)
Interest expense	3.30	2.52	0.91
OPERATING INCOME (LOSS)	4.97	15.56	(17.37)
Other income	1.02	1.94	2.74
INCOME (LOSS) BEFORE INCOME TAXES	5.99	17.50	(14.63)

---

* See page 10 for the definition of "Profit Leaders."

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
X	X	X	X	X	X	X
X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
41.87	33.32	42.55	36.39	43.08	35.17	33.80
24.91	28.72	22.37	21.55	21.36	20.03	18.29
66.78	62.04	64.92	57.94	64.44	55.20	52.09
33.22	37.96	35.08	42.06	35.56	44.80	47.91
17.21	13.53	14.58	12.26	13.11	12.29	11.15
8.32	4.71	10.68	15.51	10.25	10.48	24.00
25.53	18.24	25.26	27.77	23.36	22.77	35.15
7.69	19.72	9.82	14.29	12.20	22.03	12.76
4.53	2.19	2.36	1.53	4.10	4.05	2.31
3.16	17.53	7.46	12.76	8.10	17.98	10.45
0.56	1.90	1.46	2.64	0.65	1.02	0.71
3.72	19.43	8.92	15.40	8.75	19.00	11.16

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	3.71%	3.56%	5.06%
Direct wages	26.89	21.79	47.25
General factory salaries and wages	4.17	3.39	1.26
Packing, shipping and delivery wages	1.89	1.17	0.85
Payroll taxes	2.53	2.08	3.53
Employee benefits	3.70	3.32	1.87
TOTAL FACTORY PAYROLL	42.89	35.31	59.82
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.46	0.28	0.00
Depreciation - other	5.04	5.37	2.89
Taxes - real estate	0.39	0.22	1.07
Taxes - other	0.27	0.48	0.06
Insurance	0.73	0.74	1.10
Building rent	2.76	2.67	8.75
Utilities - heat, light, etc.	2.03	1.66	3.70
Equipment rental	2.00	1.06	9.95
Total Fixed Expenses	13.68	12.48	27.52
Other Expenses			
Factory supplies and expense	2.89	2.49	4.45
Packing, shipping and delivery expense	3.09	2.46	1.72
Repairs and maintenance	2.70	2.52	5.07
Other factory expenses	1.37	2.68	2.11
Total Other Expenses	10.05	10.15	13.35
TOTAL FACTORY EXPENSES	23.73	22.63	40.87
ADMINISTRATIVE EXPENSES			
Salaries - executive	3.91	3.85	3.15
Salaries - office	3.30	2.33	3.66
Payroll taxes	0.46	0.42	0.29
Employee benefits	0.73	0.88	0.12
Bad debts	0.46	0.62	0.34
Office supplies and expenses	0.69	0.46	0.90
Professional fees	0.92	0.81	1.03
Taxes - business	0.18	0.18	0.14
Telephone	0.69	0.69	0.52
Other administrative expenses	3.03	2.31	0.92
TOTAL ADMINISTRATIVE EXPENSES	14.37	12.55	11.07
SELLING EXPENSES			
Salaries - executive	1.67	1.41	1.17
Salaries and commissions - salesmen	4.55	5.84	0.00
Salaries - sales office clerical	0.89	1.03	0.00
Payroll taxes	0.34	0.39	0.03
Employee benefits	0.42	0.60	0.04
Advertising	0.58	0.46	0.82
Travel and entertainment	1.23	0.87	0.43
Other selling expenses	1.06	0.83	2.21
TOTAL SELLING EXPENSES	10.74	11.43	4.70

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
3.20%	1.86%	4.15%	4.41%	4.07%	3.57%	1.80%
22.57	19.12	27.39	21.02	27.46	24.59	21.39
6.66	3.69	2.91	3.91	3.92	2.50	3.71
2.06	0.78	1.46	1.30	2.36	1.25	2.25
3.11	2.17	2.21	2.35	2.54	1.65	1.01
4.27	5.70	4.43	3.40	2.73	1.61	3.64
41.87	33.32	42.55	36.39	43.08	35.17	33.80
0.72	0.00	0.47	0.37	0.38	0.35	0.21
6.31	7.57	4.92	4.64	4.84	4.87	3.81
0.22	0.00	0.46	0.34	0.32	0.19	0.37
0.35	0.23	0.13	0.36	0.47	0.82	0.05
0.81	0.54	0.74	0.70	0.64	0.92	0.43
3.09	4.44	2.08	2.46	2.08	1.78	1.37
1.74	1.06	1.93	1.98	2.24	1.64	1.39
1.21	3.67	2.98	0.54	0.27	0.03	0.03
14.45	17.51	13.71	11.39	11.24	10.60	7.66
1.98	0.98	2.75	3.61	3.02	2.02	4.56
4.77	3.97	1.64	1.21	3.30	3.14	3.13
1.88	2.23	3.28	3.18	2.46	1.83	2.15
1.83	4.03	0.99	2.16	1.34	2.44	0.79
10.46	11.21	8.66	10.16	10.12	9.43	10.63
24.91	28.72	22.37	21.55	21.36	20.03	18.29
5.38	5.08	4.11	3.66	3.04	3.30	1.69
3.75	1.49	3.17	2.19	3.09	3.07	2.75
0.78	0.49	0.41	0.45	0.34	0.32	0.14
0.92	1.62	0.67	0.87	0.60	0.40	1.22
0.70	1.22	0.17	(0.04)	0.60	1.11	0.36
0.88	0.29	0.64	0.56	0.62	0.44	0.34
0.80	0.53	0.73	0.54	1.33	1.36	0.70
0.21	0.25	0.09	0.10	0.30	0.24	0.11
0.87	0.89	0.71	0.86	0.67	0.33	0.25
2.92	1.67	3.88	3.07	2.52	1.72	3.59
17.21	13.53	14.58	12.26	13.11	12.29	11.15
1.22	0.00	1.57	1.55	1.99	2.17	2.81
3.47	2.95	4.95	8.52	3.58	4.19	12.36
0.43	0.00	0.87	1.61	1.45	0.94	1.46
0.30	0.21	0.30	0.58	0.38	0.26	0.73
0.41	0.59	0.45	0.80	0.33	0.35	0.95
0.97	0.35	0.44	0.71	0.30	0.19	0.52
1.22	0.47	1.31	0.86	1.37	1.15	1.23
0.30	0.14	0.79	0.88	0.85	1.23	3.94
8.32	4.71	10.68	15.51	10.25	10.48	24.00

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	34.68	32.42	34.72
Other chargeable materials	4.97	3.67	5.22
Outside services	6.31	5.70	6.97
TOTAL MATERIALS	45.96	41.79	46.91
FACTORY PAYROLL	23.09	20.60	31.54
FACTORY EXPENSES	12.73	13.21	20.35
TOTAL FACTORY COST OF PRODUCT	81.78	75.60	98.80
GROSS PROFIT	18.22	24.40	1.20
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	7.89	7.29	6.10
Selling expenses	5.90	7.02	2.65
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	13.79	14.31	8.75
INCOME (LOSS) BEFORE INTEREST EXPENSE	4.43	10.09	(7.55)
Interest expense	1.79	1.41	0.45
OPERATING INCOME (LOSS)	2.64	8.68	(8.00)
Other income	0.58	1.24	1.30
INCOME (LOSS) BEFORE INCOME TAXES	3.22	9.92	(6.70)

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
OTHER CHARGEABLE MATERIALS			
Ink	2.13%	1.52%	1.05%
Film	0.68	0.54	0.70
Plates	0.74	0.53	0.92
Other chargeable materials	1.42	1.08	2.55
TOTAL OTHER CHARGEABLE MATERIALS	4.97	3.67	5.22
OUTSIDE SERVICES			
Composition	0.82	1.32	3.08
Offset preparation	0.13	0.11	0.00
Printing	2.40	3.25	1.13
Binding	0.54	0.26	0.29
Other outside services	2.42	0.76	2.47
TOTAL OUTSIDE SERVICES	6.31	5.70	6.97

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
31.30	36.67	34.04	29.65	37.32	33.29	39.60
5.39	5.14	4.13	1.41	5.67	5.70	4.36
5.13	4.61	8.10	7.24	5.61	4.39	5.42
41.82	46.42	46.27	38.30	48.60	43.38	49.38
24.49	18.01	22.77	22.55	21.80	19.71	17.14
14.24	14.99	12.11	13.81	11.05	11.22	9.18
80.55	79.42	81.15	74.66	81.45	74.31	75.70
19.45	20.58	18.85	25.34	18.55	25.69	24.30
10.22	7.24	7.65	7.48	6.77	7.07	6.07
5.04	2.74	6.07	9.89	5.35	6.05	11.94
15.26	9.98	13.72	17.37	12.12	13.12	18.01
4.19	10.60	5.13	7.97	6.43	12.57	6.29
2.64	1.19	1.22	0.82	2.12	2.34	1.18
1.55	9.41	3.91	7.15	4.31-	10.23	5.11
0.33	1.07	0.90	1.84	0.36	0.56	0.42
1.88	10.48	4.81	8.99	4.67	10.79	5.53

2.32%	1.55%	1.74%	0.53%	2.89%	2.91%	1.62%
0.94	0.53	0.64	0.16	0.66	1.10	0.14
0.67	0.39	0.64	0.54	1.11	0.93	0.20
1.46	2.67	1.11	0.18	1.01	0.76	2.40
5.39	5.14	4.13	1.41	5.67	5.70	4.36
1.78	4.23	0.06	0.03	0.26	0.43	0.00
0.02	0.00	0.16	0.00	0.25	0.36	0.16
2.75	0.38	3.37	6.50	1.20	1.21	2.21
0.27	0.00	0.59	0.00	0.66	0.86	1.10
0.31	0.00	3.92	0.71	3.24	1.53	1.95
5.13	4.61	8.10	7.24	5.61	4.39	5.42

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.03%	2.20%	2.74%
Direct wages	14.47	12.68	24.78
General factory salaries and wages	2.23	1.99	0.75
Packing, shipping and delivery wages	1.00	0.69	0.56
Payroll taxes	1.36	1.21	1.80
Employee benefits	2.00	1.83	0.91
TOTAL FACTORY PAYROLL	23.09	20.60	31.54
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.27	0.16	0.00
Depreciation - other	2.72	3.19	1.37
Taxes - real estate	0.21	0.12	0.51
Taxes - other	0.15	0.31	0.04
Insurance	0.41	0.47	0.54
Building rent	1.49	1.50	4.52
Utilities - heat, light, etc.	1.09	0.99	1.36
Equipment rental	0.99	0.57	4.72
Total Fixed Expenses	7.33	7.31	13.56
Other Expenses			
Factory supplies and expense	1.57	1.55	2.27
Packing, shipping and delivery expense	1.63	1.31	0.95
Repairs and maintenance	1.43	1.51	2.52
Other factory expenses	0.77	1.53	1.05
Total Other Expenses	5.40	5.90	6.79
TOTAL FACTORY EXPENSES	12.73	13.21	20.35
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.12	2.13	1.84
Salaries - office	1.84	1.41	2.03
Payroll taxes	0.26	0.24	0.16
Employee benefits	0.40	0.47	0.06
Bad debts	0.25	0.33	0.16
Office supplies and expenses	0.38	0.28	0.44
Professional fees	0.51	0.50	0.57
Taxes - business	0.10	0.11	0.06
Telephone	0.37	0.39	0.28
Other administrative expenses	1.66	1.43	0.50
TOTAL ADMINISTRATIVE EXPENSES	7.89	7.29	6.10
SELLING EXPENSES			
Salaries - executive	0.89	0.86	0.54
Salaries and commissions - salesmen	2.56	3.63	0.00
Salaries - sales office clerical	0.49	0.66	0.00
Payroll taxes	0.18	0.23	0.01
Employee benefits	0.22	0.33	0.02
Advertising	0.34	0.26	0.43
Travel and entertainment	0.65	0.54	0.20
Other selling expenses	0.57	0.51	1.45
TOTAL SELLING EXPENSES	5.90	7.02	2.65

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
1.98%	1.09%	2.27%	2.88%	2.03%	2.02%	0.86%
13.42	10.52	14.59	12.93	13.96	13.80	11.04
3.53	1.79	1.66	2.56	2.03	1.36	1.82
1.20	0.38	0.80	0.86	1.09	0.68	1.10
1.82	1.16	1.16	1.43	1.31	0.94	0.42
2.54	3.07	2.29	1.89	1.38	0.91	1.90
24.49	18.01	22.77	22.55	21.80	19.71	17.14
0.48	0.00	0.26	0.22	0.18	0.19	0.09
3.56	4.09	2.72	3.08	2.52	2.76	1.81
0.14	0.00	0.24	0.19	0.17	0.11	0.16
0.20	0.14	0.10	0.28	0.25	0.45	0.04
0.47	0.28	0.43	0.53	0.33	0.52	0.24
1.72	2.29	1.11	1.44	1.11	1.04	0.82
1.03	0.62	1.04	1.22	1.16	0.93	0.68
0.63	1.78	1.48	0.38	0.13	0.01	0.01
8.23	9.20	7.38	7.34	5.85	6.01	3.85
1.16	0.51	1.56	2.40	1.58	1.11	2.32
2.72	1.95	0.82	0.68	1.63	1.72	1.51
1.07	1.15	1.77	2.04	1.27	1.04	1.01
1.06	2.18	0.58	1.35	0.72	1.34	0.49
6.01	5.79	4.73	6.47	5.20	5.21	5.33
14.24	14.99	12.11	13.81	11.05	11.22	9.18
3.19	2.71	2.08	2.04	1.54	1.88	0.78
2.24	0.80	1.69	1.45	1.59	1.77	1.69
0.46	0.26	0.22	0.28	0.18	0.18	0.05
0.52	0.82	0.34	0.47	0.32	0.23	0.75
0.40	0.67	0.07	(0.11)	0.33	0.67	0.20
0.52	0.16	0.34	0.34	0.32	0.26	0.19
0.49	0.29	0.39	0.38	0.69	0.80	0.44
0.12	0.14	0.05	0.08	0.17	0.13	0.05
0.52	0.51	0.37	0.49	0.34	0.19	0.11
1.76	0.88	2.10	2.06	1.29	0.96	1.81
10.22	7.24	7.65	7.48	6.77	7.07	6.07
0.75	0.00	0.87	1.00	1.02	1.24	1.27
2.09	1.72	2.87	5.48	1.92	2.47	6.63
0.26	0.00	0.53	1.08	0.77	0.53	0.67
0.18	0.12	0.17	0.34	0.20	0.15	0.29
[illegible]	0.35	0.24	0.42	0.18	0.20	0.39
[illegible]	0.20	0.24	0.39	0.16	0.11	0.28
0.72	0.28	0.70	0.58	0.67	0.67	0.57
0.18	0.07	0.45	0.60	0.43	0.68	1.84
5.04	2.74	6.07	9.89	5.35	6.05	11.94

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	4.97%	16.07%	(1.50)%
Receivables	30.25	25.35	56.61
Inventories	16.23	11.03	9.06
Other current assets	4.28	3.69	0.94
TOTAL CURRENT ASSETS	55.73	56.14	65.11
FIXED ASSETS			
Real estate	9.10	4.75	0.00
Less: Accumulated depreciation	2.39	1.33	0.00
	6.71	3.42	0.00
Machinery and equipment	61.94	58.71	40.70
Less: Accumulated depreciation	32.31	24.38	24.44
	29.63	34.33	16.26
Other fixed assets	8.58	6.01	4.36
Less: Accumulated depreciation	4.38	3.59	1.27
	4.20	2.42	3.09
NET FIXED ASSETS	40.54	40.17	19.35
OTHER ASSETS	3.73	3.69	15.54
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	12.44	7.87	4.48
Accounts payable	18.29	9.28	34.55
Other current liabilities	9.46	7.83	6.48
TOTAL CURRENT LIABILITIES	40.19	24.98	45.51
LONG-TERM LIABILITIES	25.44	27.80	8.14
TOTAL LIABILITIES	65.63	52.78	53.65
SHAREHOLDERS' AND PROPRIETORS' EQUITY	34.37	47.22	46.35
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.39	2.25	1.43
QUICK RATIO	0.98	1.81	1.23
TOTAL LIABILITIES TO EQUITY	1.91	1.12	1.16
LONG-TERM LIABILITIES TO EQUITY	0.74	0.59	0.18
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.52	0.42	0.60

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
5.76%	17.32%	7.68%	23.78%	4.04%	4.97%	1.18%
26.34	18.54	27.11	23.68	30.60	32.06	31.42
15.66	9.84	19.19	13.04	13.13	9.14	22.26
3.23	0.74	7.06	5.24	3.64	3.61	2.67
50.99	46.44	61.04	65.74	51.41	49.78	57.53
8.47	0.00	12.85	2.19	7.32	11.34	10.60
3.10	0.00	3.21	1.74	1.65	1.67	1.46
5.37	0.00	9.64	0.45	5.67	9.67	9.14
76.13	82.00	59.09	51.31	62.72	53.04	42.42
40.01	30.61	34.28	24.07	27.61	20.63	21.64
36.12	51.39	24.81	27.24	35.11	32.41	20.78
11.47	3.18	7.11	8.83	7.26	4.16	11.50
6.59	1.16	3.84	6.08	3.62	1.90	3.93
4.88	2.02	3.27	2.75	3.64	2.26	7.57
46.37	53.41	37.72	30.44	44.42	44.34	37.49
2.64	0.15	1.24	3.82	4.17	5.88	4.98
100.00	100.00	100.00	100.00	100.00	100.00	100.00
19.21	8.38	9.36	9.69	11.87	5.09	9.63
14.31	10.66	19.85	9.28	19.50	8.37	9.72
7.39	4.54	8.97	7.36	12.45	10.65	11.24
40.91	23.58	38.18	26.33	43.82	24.11	30.59
28.84	20.34	15.21	11.32	39.53	54.75	22.77
69.75	43.92	53.39	37.65	83.35	78.86	53.36
30.25	56.08	46.61	62.35	16.65	21.14	46.64
100.00	100.00	100.00	100.00	100.00	100.00	100.00
1.25	1.97	1.60	2.50	1.17	2.06	1.88
0.86	1.55	1.10	2.00	0.87	1.69	1.15
2.31	0.78	1.15	0.60	5.01	3.73	1.14
0.95	0.36	0.33	0.18	2.37	2.59	0.49
0.53	0.37	0.58	0.47	0.44	0.39	0.51

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 40,162	$ 54,231	$ 23,801
Average assets per factory employee (Excluding Executives)	56,799	77,954	30,479
Average net worth per employee - All employees	14,900	27,577	11,651
Average gross plant investment per factory employee (Excluding Executives)	43,202	49,769	16,411
Net worth percentage of fixed assets	144.54%	160.89%	774.13%
EMPLOYEES			
Percent factory - All employees	79.29%	77.41%	86.67%
Percent administrative - All employees	11.22	11.31	12.22
Percent sales - All employees	9.49	11.28	1.11
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 84,968	$ 93,196	$ 63,052
Sales per factory employee	109,880	122,050	73,878
Sales less material per factory employee	58,486	70,416	38,693
Sales per administrative employee	861,833	873,118	241,979
EXCLUDING EXECUTIVES			
Sales per employee - All employees	93,669	102,456	70,421
Sales per factory employee	117,567	129,575	79,084
Sales less material per factory employee	62,609	74,955	41,516
SALES PER SALESMAN	1,131,890	1,134,137	0
SALES TO CURRENT ASSETS	442%	390%	457%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	32.05%	30.56%	36.20%
Factory payroll percentage of gross plant investment	65.24	54.19	74.65
Payroll per employee - All employees	$ 26,216	$ 27,642	$ 22,194
Payroll per factory employee	23,593	24,210	22,200
Payroll per administrative employee	34,986	36,384	13,870
Payroll per sales employee	35,655	45,125	13,097
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 20,212	$ 20,745	$ 19,259
Payroll per factory employee	19,232	19,139	19,848
Payroll per administrative employee	16,970	16,350	9,668
Payroll per sales employee	28,547	35,323	0
EXECUTIVE PAYROLL			
Payroll per executive - All executives	49,004	56,833	29,279
Payroll per factory executive	34,765	49,650	29,574
Payroll per administrative executive	68,086	62,230	22,795
Payroll per sales executive	47,357	75,447	12,345
RECEIVABLES			
Collection period	50.6	54.5	73.6
PROFIT			
Gross profit percentage of sales	18.22%	24.40%	1.20%
Average gross profit per factory employee	$ 23,163	$ 32,555	$ 2,694
Income (loss) before taxes percentage of sales	3.22%	9.92%	(6.70)%
Average income (loss) before taxes per employee	$ 3,327	$ 436	$ (3,940)

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 37,605	$ 46,382	$ 42,827	$ 57,628	$ 41,872	$ 54,936	$ 46,745
52,460	57,701	63,364	92,553	54,908	71,989	73,417
12,212	26,313	22,320	41,793	7,159	9,464	22,577
47,434	49,022	46,711	52,618	40,361	46,470	47,008
73.18%	113.78%	158.99%	277.19%	38.87%	37.24%	130.03%
78.36%	83.62%	78.54%	71.64%	82.52%	80.94%	70.11%
14.32	11.38	10.78	11.33	9.05	11.25	8.56
7.32	5.00	10.68	17.03	8.43	7.81	21.33
$ 79,411	$105,144	$ 82,129	$ 81,180	$ 94,045	$ 101,254	$ 102,347
102,293	126,240	107,130	116,440	114,964	126,738	154,603
59,076	68,223	56,888	69,795	60,063	72,706	72,413
574,473	942,970	870,243	808,110	1,087,968	913,225	1,539,596
87,856	114,677	91,129	90,967	103,261	109,626	110,423
108,192	130,831	115,974	126,711	123,775	132,558	162,656
62,674	70,918	61,640	76,223	64,633	75,956	75,822
728,010	0	1,059,518	1,258,712	1,621,895	1,009,561	547,537
470%	510%	395%	298%	488%	431%	374%
34.43%	24.78%	31.79%	35.10%	29.52%	28.36%	29.67%
64.38	48.16	55.04	57.10	79.23	54.34	55.46
$ 26,069	$ 26,322	$ 25,391	$ 27,397	$ 27,847	$ 28,849	$ 27,868
23,865	23,117	23,020	24,859	24,842	24,073	22,246
33,885	42,681	38,533	33,137	38,344	36,516	33,365
24,171	24,208	37,544	42,870	49,118	62,076	43,859
$ 19,224	$ 17,725	$ 19,198	$ 20,970	$ 22,038	$ 22,457	$ 22,169
18,840	16,884	18,415	19,513	20,855	20,143	18,137
16,841	15,408	15,991	13,650	20,066	20,577	17,500
19,229	19,006	33,573	36,071	37,352	45,203	37,362
48,024	48,018	46,215	43,759	57,052	80,142	53,672
24,144	24,038	34,159	35,522	46,368	85,561	40,579
55,646	50,999	75,090	59,767	88,071	73,002	61,656
19,558	0	42,641	60,234	85,877	146,031	66,407
43.2	30.5	50.0	56.5	51.5	67.8	55.0
19.45%	20.58%	18.85%	25.34%	18.55%	25.69%	24.30%
$ 22,211	$ 27,641	$ 22,990	$ 32,273	$ 24,134	$ 36,207	$ 39,262
1.88%	10.48%	4.81%	8.99%	4.67%	10.79%	5.53%
$ 2,424	$ 11,100	$ 4,007	$ 7,329	$ 4,717	$ 11,136	$ 5,449

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO $1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 3.54	$13.45	$ (0.40)
Receivables	13.41	14.47	19.19
Inventories	7.38	6.15	4.05
Marketable securities	0.92	2.84	0.00
Other current assets	1.14	0.90	0.31
	26.39	37.81	23.15
Plant Investment:			
Land and building	5.01	3.21	0.00
Machinery and equipment	28.95	33.42	16.87
Other fixed assets	3.92	3.01	1.65
	37.88	39.64	18.52
Non-Current Assets	1.82	1.84	8.26
TOTAL INVESTMENT	66.09	79.29	49.93
INVESTMENT TURNOVER PER $100 OF SALES	151.31%	126.12%	200.28%
EARNINGS			
Cost of Product	$81.78	$75.60	$ 98.80
Selling Expenses	5.90	7.02	2.65
Administrative Expenses	7.89	7.29	6.10
	95.57	89.91	107.55
Income (Loss) Before Interest, Other Income and Taxes	4.43	10.09	(7.55)
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME (LOSS)	6.70%	12.73%	(15.12)%

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 2.66	$ 7.63	$ 7.60	$24.40	$ 1.86	$ 2.75	$ 0.57
11.61	8.18	13.27	15.13	13.53	17.76	14.68
7.12	4.34	9.01	7.90	5.64	5.02	10.13
0.46	0.00	2.09	6.16	0.22	0.30	1.11
0.84	0.33	1.73	0.64	1.32	1.64	0.28
22.69	20.48	33.70	54.23	22.57	27.47	26.77
4.85	0.00	7.95	2.98	3.01	5.65	5.13
33.41	36.18	31.75	35.86	27.26	28.33	20.13
4.98	1.40	3.48	4.37	3.20	2.26	5.85
43.24	37.58	43.18	43.21	33.47	36.24	31.11
1.24	0.06	0.53	1.63	2.05	3.31	2.34
67.17	58.12	77.41	99.07	58.09	67.02	60.22
148.88%	172.06%	129.18%	100.94%	172.15%	149.21%	166.06%
$80.55	$79.42	$81.15	$74.66	$81.45	$74.31	$75.70
5.04	2.74	6.07	9.89	5.35	6.05	11.94
10.22	7.24	7.65	7.48	6.77	7.07	6.07
95.81	89.40	94.87	92.03	93.57	87.43	93.71
4.19	10.60	5.13	7.97	6.43	12.57	6.29
6.24%	18.24%	6.63%	8.04%	11.07%	18.76%	10.45%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	40.06	35.84	58.73
FACTORY EXPENSES	25.00	23.89	19.49
TOTAL FACTORY COST OF PRODUCT	65.06	59.73	78.22
GROSS PROFIT	34.94	40.27	21.78
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	14.58	12.31	13.62
Selling expenses	9.19	9.75	0.81
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	23.77	22.06	14.43
INCOME BEFORE INTEREST EXPENSE	11.17	18.21	7.35
Interest expense	4.07	3.03	2.74
OPERATING INCOME	7.10	15.18	4.61
Other income	0.55	0.83	1.28
INCOME BEFORE INCOME TAXES	7.65	16.01	5.89

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
X	X	X	X
X	X	X	X
100.00%	100.00%	100.00%	100.00%
49.30	45.63	41.54	33.86
22.09	17.54	24.09	20.63
71.39	63.17	65.63	54.49
28.61	36.83	34.37	45.51
16.58	13.20	13.40	13.41
6.77	7.22	17.50	15.12
23.35	20.42	30.90	28.53
5.26	16.41	3.47	16.98
4.66	3.75	2.16	1.79
0.60	12.66	1.31	15.19
0.78	0.55	1.95	3.57
1.38	13.21	3.26	18.76

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	3.51%	4.15%	2.24%
Direct wages	25.78	21.51	27.41
General factory salaries and wages	3.33	3.70	15.75
Packing, shipping and delivery wages	2.23	1.26	1.38
Payroll taxes	2.60	2.50	2.60
Employee benefits	2.61	2.72	9.35
TOTAL FACTORY PAYROLL	40.06	35.84	58.73
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.70	0.25	0.28
Depreciation - other	5.64	5.34	5.50
Taxes - real estate	0.28	0.11	0.62
Taxes - other	0.30	0.41	0.17
Insurance	0.84	1.10	0.96
Building rent	2.57	3.31	1.91
Utilities - heat, light, etc.	1.95	1.43	1.58
Equipment rental	1.89	1.79	2.78
Total Fixed Expenses	14.17	13.74	13.80
Other Expenses			
Factory supplies and expense	2.96	2.60	1.10
Packing, shipping and delivery expense	4.15	3.01	0.95
Repairs and maintenance	2.75	2.89	3.39
Other factory expenses	0.97	1.65	0.25
Total Other Expenses	10.83	10.15	5.69
TOTAL FACTORY EXPENSES	25.00	23.89	19.49
ADMINISTRATIVE EXPENSES			
Salaries - executive	4.11	3.92	6.29
Salaries - office	3.34	2.59	2.52
Payroll taxes	0.52	0.48	0.56
Employee benefits	0.61	0.91	0.77
Bad debts	0.49	0.58	0.23
Office supplies and expenses	0.85	0.44	0.98
Professional fees	0.93	1.01	0.82
Taxes - business	0.19	0.10	0.00
Telephone	0.88	0.50	0.32
Other administrative expenses	2.66	1.78	1.13
TOTAL ADMINISTRATIVE EXPENSES	14.58	12.31	13.62
SELLING EXPENSES			
Salaries - executive	1.64	1.81	0.00
Salaries and commissions - salesmen	3.60	4.56	0.51
Salaries - sales office clerical	0.61	0.86	0.00
Payroll taxes	0.33	0.36	0.00
Employee benefits	0.23	0.29	0.04
Advertising	0.60	0.19	0.04
Travel and entertainment	1.62	1.09	0.14
Other selling expenses	0.56	0.59	0.08
TOTAL SELLING EXPENSES	9.19	9.75	0.81

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
1.05%	4.89%	4.36%	3.39%
33.07	29.57	26.45	20.38
5.19	2.66	3.14	2.22
1.75	2.37	1.65	0.70
3.43	3.01	2.00	1.96
4.81	3.13	3.94	5.21
49.30	45.63	41.54	33.86
0.11	0.10	0.34	0.32
5.20	4.22	4.22	5.34
0.00	0.25	0.63	0.45
0.78	0.37	0.13	0.30
0.26	0.48	0.71	0.27
3.65	1.91	3.16	1.80
2.23	2.24	2.23	2.03
0.36	0.14	2.40	0.18
12.59	9.71	13.82	10.69
1.79	2.54	3.29	2.27
2.95	1.98	2.22	1.43
2.38	2.15	2.67	1.99
2.38	1.16	2.09	4.25
9.50	7.83	10.27	9.94
22.09	17.54	24.09	20.63
3.67	3.26	2.96	4.16
3.34	2.41	3.41	1.82
0.57	0.51	0.28	0.39
0.75	0.38	0.96	1.02
0.22	0.70	0.52	0.82
0.43	0.32	0.52	0.54
1.50	1.69	0.57	0.41
0.41	0.69	0.09	0.15
0.42	0.53	0.55	1.17
5.27	2.71	3.54	2.93
16.58	13.20	13.40	13.41
1.44	2.54	2.07	0.67
2.73	2.21	8.02	8.96
0.50	1.10	1.60	1.28
0.18	0.33	0.48	0.53
0.13	0.28	0.94	1.23
0.29	0.09	0.88	0.91
0.61	0.37	1.19	0.56
0.89	0.30	2.32	0.98
6.77	7.22	17.50	15.12

REPORT ON OPERATIONS - SALES = 100%

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIAL			
Paper	33.59	33.19	40.12
Other chargeable materials	6.10	4.18	6.07
Outside services	7.35	2.86	2.67
TOTAL MATERIALS	47.04	40.23	48.86
FACTORY PAYROLL	20.93	21.62	30.03
FACTORY EXPENSES	13.31	14.20	9.98
TOTAL FACTORY COST OF PRODUCT	81.28	76.05	88.87
GROSS PROFIT	18.72	23.95	11.13
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	7.81	7.39	6.95
Selling expenses	5.00	6.34	0.42
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	12.81	13.73	7.37
INCOME BEFORE INTEREST EXPENSE	5.91	10.22	3.76
Interest expense	2.14	1.73	1.40
OPERATING INCOME (LOSS)	3.77	8.49	2.36
Other income	0.36	0.72	0.66
INCOME BEFORE INCOME TAXES	4.13	9.21	3.02

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
OTHER CHARGEABLE MATERIALS			
Ink	3.41%	2.61%	2.33%
Film	0.72	0.75	1.26
Plates	0.83	0.82	1.08
Other chargeable materials	1.14	0.00	1.40
TOTAL OTHER CHARGEABLE MATERIALS	6.10	4.18	6.07
OUTSIDE SERVICES			
Composition	0.59	0.35	0.00
Offset preparation	0.16	0.35	0.26
Printing	2.10	1.20	0.46
Binding	0.64	0.13	0.41
Other outside services	3.86	0.83	1.54
TOTAL OUTSIDE SERVICES	7.35	2.86	2.67

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%
33.53	39.02	34.35	30.54
4.47	3.38	3.51	2.39
4.75	1.78	5.84	10.09
42.75	44.18	43.70	43.02
28.90	25.27	23.50	19.10
12.67	9.75	13.17	11.93
84.32	79.20	80.37	74.05
15.68	20.80	19.63	25.95
9.51	7.57	7.81	7.53
3.69	4.13	9.71	8.92
13.20	11.70	17.52	16.45
2.48	9.10	2.11	9.50
2.71	2.15	1.22	0.94
(0.23)	6.95	0.89	8.56
0.34	0.22	1.08	2.05
0.11	7.17	1.97	10.61

1.27%	0.81%	0.66%	0.37%
1.12	0.64	0.35	0.08
0.99	1.26	0.37	0.08
1.09	0.67	2.13	1.86
4.47	3.38	3.51	2.39
1.92	0.13	1.21	2.94
0.16	0.00	0.08	0.00
0.50	0.87	3.53	6.88
1.06	0.57	0.05	0.00
1.11	0.21	0.97	0.27
4.75	1.78	5.84	10.09

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	1.88%	2.67%	1.16%
Direct wages	13.39	13.00	14.14
General factory salaries and wages	1.76	2.17	7.91
Packing, shipping and delivery wages	1.14	0.79	0.71
Payroll taxes	1.40	1.49	1.33
Employee benefits	1.36	1.50	4.78
TOTAL FACTORY PAYROLL	20.93	21.62	30.03
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.42	0.17	0.14
Depreciation - other	3.02	3.30	2.82
Taxes - real estate	0.16	0.07	0.32
Taxes - other	0.18	0.29	0.09
Insurance	0.47	0.73	0.49
Building rent	1.36	1.87	0.97
Utilities - heat, light, etc.	1.05	0.95	0.81
Equipment rental	0.93	0.94	1.44
Total Fixed Expenses	7.59	8.32	7.08
Other Expenses			
Factory supplies and expense	1.60	1.69	0.56
Packing, shipping and delivery expense	2.16	1.55	0.48
Repairs and maintenance	1.45	1.78	1.74
Other factory expenses	0.51	0.86	0.12
Total Other Expenses	5.72	5.88	2.90
TOTAL FACTORY EXPENSES	13.31	14.20	9.98
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.18	2.19	3.19
Salaries - office	1.80	1.65	1.30
Payroll taxes	0.29	0.29	0.29
Employee benefits	0.32	0.49	0.40
Bad debts	0.25	0.27	0.12
Office supplies and expenses	0.46	0.28	0.50
Professional fees	0.51	0.66	0.42
Taxes - business	0.11	0.07	0.00
Telephone	0.48	0.31	0.16
Other administrative expenses	1.41	1.18	0.57
TOTAL ADMINISTRATIVE EXPENSES	7.81	7.39	6.95
SELLING EXPENSES			
Salaries - executive	0.85	1.14	0.00
Salaries and commissions - salesmen	2.03	3.01	0.27
Salaries - sales office clerical	0.35	0.61	0.00
Payroll taxes	0.18	0.22	0.00
Employee benefits	0.13	0.17	0.02
Advertising	0.35	0.13	0.02
Travel and entertainment	0.83	0.70	0.07
Other selling expenses	0.28	0.36	0.04
TOTAL SELLING EXPENSES	5.00	6.34	0.42

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
0.56%	2.73%	2.53%	1.92%
19.32	16.34	15.00	11.46
2.95	1.44	1.79	1.39
0.94	1.47	0.90	0.38
2.08	1.69	1.07	1.08
3.05	1.60	2.21	2.87
28.90	25.27	23.50	19.10
0.06	0.05	0.18	0.15
2.99	2.33	2.37	3.03
0.00	0.12	0.32	0.26
0.45	0.18	0.08	0.19
0.16	0.28	0.40	0.14
2.03	1.10	1.76	1.00
1.29	1.21	1.19	1.08
0.23	0.09	1.16	0.12
7.21	5.36	7.46	5.97
1.03	1.43	1.83	1.36
1.73	1.09	1.21	0.83
1.34	1.16	1.43	1.15
1.36	0.71	1.24	2.62
5.46	4.39	5.71	5.96
12.67	9.75	13.17	11.93
2.18	1.89	1.72	2.27
1.93	1.39	2.05	1.04
0.34	0.29	0.16	0.21
0.43	0.20	0.56	0.52
0.12	0.36	0.31	0.48
0.25	0.18	0.30	0.30
0.87	0.96	0.35	0.22
0.22	0.41	0.05	0.09
0.25	0.29	0.30	0.62
2.92	1.60	2.01	1.78
9.51	7.57	7.81	7.53
0.77	1.51	1.11	0.38
1.51	1.28	4.56	5.39
0.27	0.58	0.87	0.75
0.10	0.19	0.24	0.30
0.07	0.15	0.49	0.66
0.15	0.05	0.51	0.48
0.34	0.19	0.67	0.33
0.48	0.18	1.26	0.63
3.69	4.13	9.71	8.92

BALANCE SHEET

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	3.95%	11.99%	(0.90)%
Receivables	32.47	27.28	30.33
Inventories	13.08	8.36	16.72
Other current assets	5.34	6.04	3.71
TOTAL CURRENT ASSETS	54.84	53.67	49.86
FIXED ASSETS			
Real estate	8.12	7.31	24.12
Less: Accumulated depreciation	2.92	2.03	1.78
	5.20	5.28	22.34
Machinery and equipment	68.24	57.81	89.55
Less: Accumulated depreciation	33.12	20.14	67.24
	35.12	37.67	22.31
Other fixed assets	7.19	3.91	6.68
Less: Accumulated depreciation	4.18	1.69	1.19
	3.01	2.22	5.49
NET FIXED ASSETS	43.33	45.17	50.14
OTHER ASSETS	1.83	1.16	0.00
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	9.78	6.87	22.88
Accounts payable	19.48	8.02	22.15
Other current liabilities	9.61	9.68	9.82
TOTAL CURRENT LIABILITIES	38.87	24.57	54.85
LONG-TERM LIABILITIES	32.37	36.59	18.89
TOTAL LIABILITIES	71.24	61.16	73.74
SHAREHOLDERS' AND PROPRIETORS' EQUITY	28.76	38.84	26.26
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.41	2.18	0.91
QUICK RATIO	1.07	1.84	0.60
TOTAL LIABILITIES TO EQUITY	2.48	1.57	2.81
LONG-TERM LIABILITIES TO EQUITY	1.13	0.94	0.72
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.49	0.35	0.75

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
1.94%	9.26%	8.18%	28.23%
29.06	23.51	29.87	20.30
16.28	13.87	19.34	15.01
2.03	5.21	2.16	0.65
49.31	51.85	59.55	64.19
2.06	20.15	8.49	0.00
0.60	0.00	2.88	0.00
1.46	20.15	5.61	0.00
53.03	30.94	54.47	61.04
16.45	9.21	31.47	32.67
36.58	21.73	23.00	28.37
6.17	3.63	11.59	9.28
2.29	3.15	6.36	7.04
3.88	0.48	5.23	2.24
41.92	42.36	33.84	30.61
8.77	5.79	6.61	5.20
100.00	100.00	100.00	100.00
45.73	6.25	7.23	12.15
21.07	11.13	14.51	9.27
8.85	10.45	8.72	3.01
75.65	27.83	30.46	24.43
25.32	49.60	14.57	6.75
100.97	77.43	45.03	31.18
(0.97)	22.57	54.97	68.82
100.00	100.00	100.00	100.00
0.65	1.86	1.96	2.63
0.44	1.36	1.32	2.01
(104.09)	3.43	0.82	0.45
(26.10)	2.20	0.27	0.10
0.31	0.30	0.58	0.54

SIGNIFICANT FACTS

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 40,269	$ 55,862	$ 29,115
Average assets per factory employee (Excluding Executives)	53,510	75,449	33,642
Average net worth per employee - All employees	12,644	24,273	8,361
Average gross plant investment per factory employee (Excluding Executives)	42,635	48,692	39,936
Net worth percentage of fixed assets	76.79%	100.80%	51.87%
EMPLOYEES			
Percent factory - All employees	82.00%	81.59%	88.03%
Percent administrative - All employees	11.13	11.72	11.44
Percent sales - All employees	6.87	6.69	0.53
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 87,656	$ 91,186	$ 72,713
Sales per factory employee	107,879	112,624	83,055
Sales less material per factory employee	57,234	66,832	42,378
Sales per administrative employee	950,827	853,099	694,185
EXCLUDING EXECUTIVES			
Sales per employee - All employees	95,993	99,572	79,161
Sales per factory employee	114,799	119,033	84,787
Sales less material per factory employee	60,989	70,969	43,269
SALES PER SALESMAN	1,255,565	1,308,970	936,625
SALES TO CURRENT ASSETS	476%	417%	558%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	29.06%	31.38%	35.49%
Factory payroll percentage of gross plant investment	54.74	54.47	69.55
Payroll per employee - All employees	$ 25,201	$ 27,414	$ 25,830
Payroll per factory employee	22,138	23,057	24,837
Payroll per administrative employee	38,901	37,808	33,155
Payroll per sales employee	40,510	52,784	22,854
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 19,368	$ 20,264	$ 19,285
Payroll per factory employee	18,345	18,283	19,383
Payroll per administrative employee	17,510	16,511	15,329
Payroll per sales employee	32,432	40,612	21,650
EXECUTIVE PAYROLL			
Payroll per executive - All executives	54,465	67,723	43,501
Payroll per factory executive	37,285	59,193	27,286
Payroll per administrative executive	83,900	73,532	47,484
Payroll per sales executive	53,804	113,321	0
RECEIVABLES			
Collection period	52.2	60.3	44.0
PROFIT			
Gross profit percentage of sales	18.72%	23.95%	11.13%
Average gross profit per factory employee	$ 22,331	$ 30,001	$ 9,506
Income before taxes percentage of sales	4.13%	9.21%	3.02%
Average income before taxes per employee	$ 3,842	$ 8,742	$ 2,140

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 38,866	$ 56,776	$ 41,423	$ 53,827
47,390	84,872	66,695	88,518
3,160	13,196	23,666	38,446
28,098	55,647	48,304	54,597
8.63%	64.46%	321.35%	296.26%
84.01%	77.36%	72.05%	68.91%
10.19	11.38	11.09	11.40
5.80	11.26	16.86	19.69
$ 78,053	$ 99,198	$ 82,247	$ 99,693
92,945	128,260	119,985	144,376
52,087	71,615	64,392	81,448
819,614	988,541	783,729	888,066
82,215	112,971	91,474	111,942
94,932	141,636	129,527	155,632
53,151	79,231	69,540	87,825
1,309,690	2,109,881	468,843	272,653
446%	373%	368%	341%
36.50%	32.74%	35.27%	30.63%
106.12	137.47	54.37	54.75
$ 26,588	$ 32,036	$ 26,970	$ 29,916
24,570	32,413	24,034	27,395
35,407	32,459	29,832	36,825
38,683	34,602	32,747	37,403
$ 21,131	$ 25,162	$ 20,965	$ 21,883
20,723	27,309	19,106	20,405
19,439	15,653	16,278	15,873
29,595	22,928	26,817	30,462
54,716	47,417	41,766	42,407
23,529	37,188	35,646	38,671
81,152	64,220	45,541	47,194
64,737	65,112	39,238	21,240
55.0	52.0	51.6	41.2
15.68%	20.80%	19.63%	25.95%
$ 16,455	$ 29,572	$ 28,673	$ 40,034
0.11%	7.17%	1.97%	10.61%
$ 1,372	$ 7,173	$ 2,729	$ 10,548

RETURN ON INVESTMENT - PER $100 OF SALES

	COMMERCIAL AND ADVERTISING		NEWSPAPER**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 3.50	$12.07	$(0.63)
Receivables	13.95	15.96	11.29
Inventories	5.40	4.45	6.34
Marketable securities	1.63	5.11	0.85
Other current assets	1.07	1.28	0.86
	25.55	38.87	18.71
Plant Investment:			
Land and building	3.91	5.08	12.54
Machinery and equipment	30.74	35.40	34.58
Other fixed assets	2.97	2.04	2.00
	37.62	42.52	49.12
Non-Current Assets	0.79	0.65	0.00
TOTAL INVESTMENT	63.96	82.04	67.83
INVESTMENT TURNOVER PER $100 OF SALES	156.35%	121.89%	147.43%
EARNINGS			
Cost of Product	$81.28	$76.05	$88.87
Selling Expenses	5.00	6.34	0.42
Administrative Expenses	7.81	7.39	6.95
	94.09	89.78	96.24
Income Before Interest, Other Income, and Taxes	5.91	10.22	3.76
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	9.24%	12.46%	5.54%

** Sample insufficient for Profit Leaders.

BOOK**	DIRECTORY**	NO PREDOMINANT SPECIALTY	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 0.85	$ 4.18	$ 5.42	$20.25
14.31	13.52	13.71	11.01
7.82	6.65	10.36	8.70
0.00	0.00	0.34	0.00
0.98	2.47	0.78	0.36
23.96	26.82	30.61	40.32
1.16	16.49	4.84	0.00
25.30	19.34	28.86	30.69
2.95	2.97	5.75	4.34
29.41	38.80	39.45	35.03
4.56	3.15	3.30	2.20
57.93	68.77	73.36	77.55
172.62%	145.41%	136.31%	128.95%
$84.32	$79.20	$80.37	$74.05
3.69	4.13	9.71	8.92
9.51	7.57	7.81	7.53
97.52	90.90	97.89	90.50
2.48	9.10	2.11	9.50
4.28%	13.23%	2.88%	12.25%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING** TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	43	$ 4,862,000	$10,165,000	$ 469,000
TOTAL - PROFIT LEADERS*	9	5,358,000	8,626,000	830,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$1,500,000	3	341,000	887,000	(45,000)
$1,500,000-$5,000,000	12	1,424,000	2,858,000	68,000
$5,000,000-$10,000,000	13	4,098,000	7,218,000	343,000
$10,000,000-$20,000,000	11	5,880,000	13,322,000	590,000
Over $20,000,000	4	18,257,000	39,944,000	2,137,000
PROFIT LEADERS				
$1,500,000-$5,000,000	2	1,526,000	3,455,000	341,000
$5,000,000-$10,000,000	4	5,966,000	7,516,000	658,000
$10,000,000-$20,000,000	3	7,103,000	13,554,000	1,384,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Commercial and Advertising	20	4,530,000	9,309,000	427,000
Newspaper	3	2,023,000	4,169,000	138,000
Book	3	4,053,000	7,761,000	370,000
Directory	2	3,526,000	7,308,000	544,000
No Predominant Specialty	13	6,635,000	13,977,000	647,000
PROFIT LEADERS				
Commercial and Advertising	5	6,772,000	10,545,000	960,000
No Predominant Specialty	3	2,691,000	4,590,000	464,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

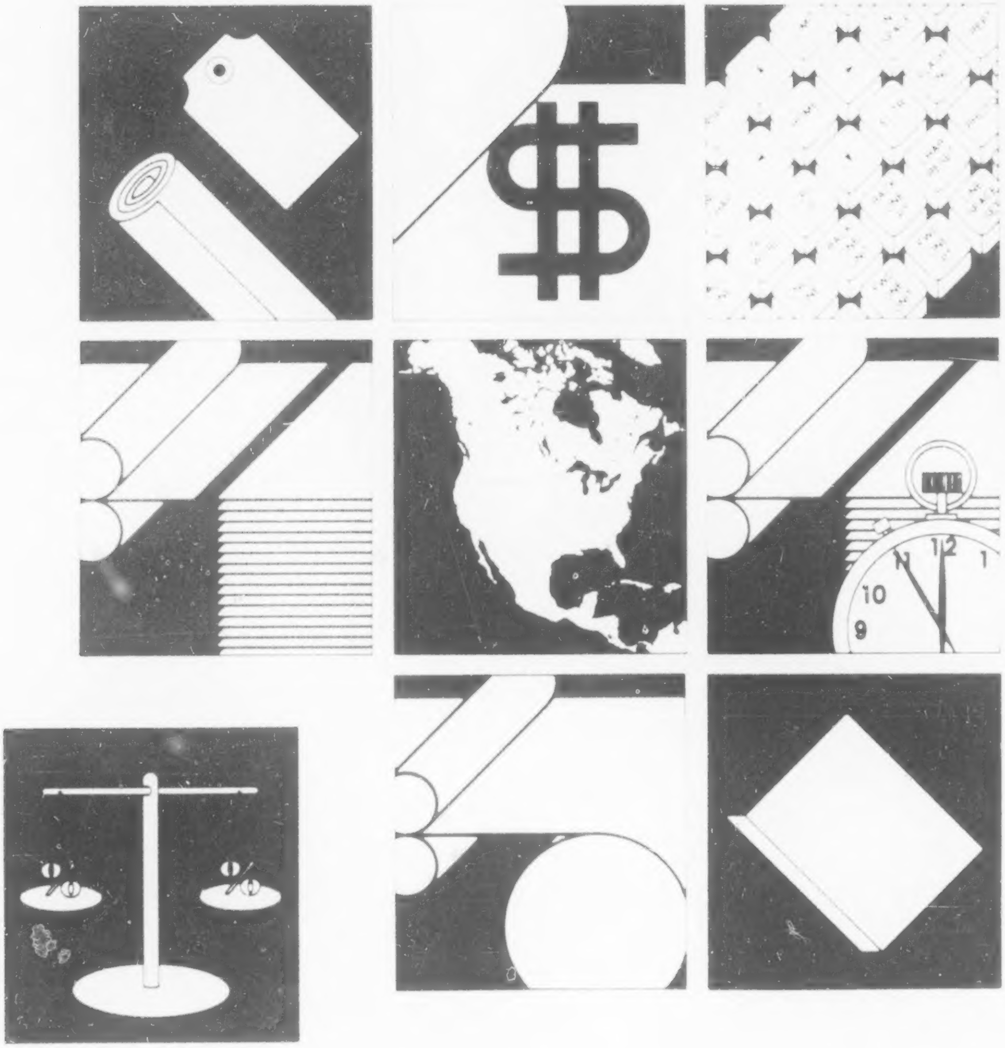
---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages.

A8740-1.8U
10/87

1987 Financial Ratio Study



Volume VIII

Combination Offset—Sheetfed/Web

**1987
FINANCIAL
RATIO STUDY**

Volume VIII: Combination Offset—Sheetfed/Web

**An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209**

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-48

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

Offices:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 826 printers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by product specialty - for example, Commercial and Advertising, Magazine and Periodical, Newspaper, etc. Readers can compare their firm's operations with other firms having the same product specialty in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

VALUE ADDED -- WHAT IT MEANS TO YOU.................................... 4- 5

CHAPTER 1 - BY SIZE OF FIRM. 6-19
- Report on Operations - Value Added = 100%........................... 6- 7
- Supporting Schedules - Value Added = 100%........................... 8- 9
- Report on Operations - Sales = 100%................................. 10-11
- Supporting Schedules - Sales = 100%................................. 10-13
- Balance Sheet... 14-15
- Significant Facts... 16-17
- Return on Investment - Per $100 of Sales............................ 18-19

CHAPTER 2 - BY PRODUCT SPECIALTY....................................... 20-33
- Report on Operations - Value Added = 100%........................... 20-21
- Supporting Schedules - Value Added = 100%........................... 22-23
- Report on Operations - Sales = 100%................................. 24-25
- Supporting Schedules - Sales = 100%................................. 24-27
- Balance Sheet... 28-29
- Significant Facts... 30-31
- Return on Investment - Per $100 of Sales............................ 32-33

CHAPTER 3 - BY PERCENTAGE OF WEB SALES................................. 34-47
- Report on Operations - Value Added = 100%........................... 34-35
- Supporting Schedules - Value Added = 100%........................... 36-37
- Report on Operations - Sales = 100%................................. 38-39
- Supporting Schedules - Sales = 100%................................. 38-41
- Balance Sheet... 42-43
- Significant Facts... 44-45
- Return on Investment - Per $100 of Sales............................ 46-47

ABSOLUTE DATA.. 48

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	42.92	39.72	37.62
FACTORY EXPENSES	21.45	20.90	21.21
TOTAL FACTORY COST OF PRODUCT	64.37	60.62	58.83
GROSS PROFIT	35.63	39.38	41.17
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	13.30	11.34	19.59
Selling expenses	12.84	10.56	11.73
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	26.14	21.90	31.32
INCOME BEFORE INTEREST EXPENSE	9.49	17.48	9.85
Interest expense	3.53	2.56	3.28
OPERATING INCOME	5.96	14.92	6.57
Other income	1.64	3.16	0.23
INCOME BEFORE INCOME TAXES	7.60	18.08	6.80

---

* See page 10 for the definition of "Profit Leaders."
** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
41.13	38.32	41.88	39.67	45.68	41.33	43.59	40.02
20.72	22.84	23.12	20.35	20.13	19.65	21.63	21.08
61.85	61.16	65.00	60.02	65.81	60.98	65.22	61.10
38.15	38.84	35.00	39.98	34.19	39.02	34.78	38.90
16.67	12.35	13.75	11.66	10.53	9.87	11.72	10.76
10.98	8.41	12.68	12.30	14.98	10.56	11.18	8.88
27.65	20.76	26.43	23.96	25.51	20.43	22.90	19.64
10.50	18.08	8.57	16.02	8.68	18.59	11.88	19.26
3.54	3.54	3.53	2.22	3.99	4.24	2.59	0.45
6.96	14.54	5.04	13.80	4.69	14.35	9.29	18.81
3.25	7.05	1.45	2.59	1.06	1.49	2.04	1.34
10.21	21.59	6.49	16.39	5.75	15.84	11.33	20.15

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.65%	2.44%	2.65%
Direct wages	29.16	27.03	28.14
General factory salaries and wages	3.33	2.81	1.04
Packing, shipping and delivery wages	1.41	1.52	0.58
Payroll taxes	2.73	2.55	2.81
Employee benefits	3.64	3.37	2.40
TOTAL FACTORY PAYROLL	42.92	39.72	37.62
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.46	0.48	0.07
Depreciation - other	5.83	5.90	5.63
Taxes - real estate	0.36	0.35	0.08
Taxes - other	0.31	0.25	0.34
Insurance	0.71	0.78	1.23
Building rent	1.70	1.47	3.24
Utilities - heat, light, etc.	2.14	1.97	2.08
Equipment rental	1.15	0.97	2.31
Total Fixed Expenses	12.66	12.17	14.98
Other Expenses			
Factory supplies and expense	3.36	2.80	2.53
Packing, shipping and delivery expense	1.60	1.89	1.07
Repairs and maintenance	2.64	2.78	2.34
Other factory expenses	1.19	1.26	0.29
Total Other Expenses	8.79	8.73	6.23
TOTAL FACTORY EXPENSES	21.45	20.90	21.21
ADMINISTRATIVE EXPENSES			
Salaries - executive	3.74	3.10	9.04
Salaries - office	3.06	2.46	4.05
Payroll taxes	0.47	0.38	1.08
Employee benefits	0.82	0.80	1.27
Bad debts	0.92	0.64	0.22
Office supplies and expenses	0.61	0.53	0.71
Professional fees	0.79	0.81	0.91
Taxes - business	0.15	0.26	0.14
Telephone	0.59	0.57	0.57
Other administrative expenses	2.15	1.79	1.60
TOTAL ADMINISTRATIVE EXPENSES	13.30	11.34	19.59
SELLING EXPENSES			
Salaries - executive	1.62	1.29	2.42
Salaries and commissions - salesmen	6.31	5.06	5.57
Salaries - sales office clerical	1.08	1.02	0.44
Payroll taxes	0.47	0.34	0.58
Employee benefits	0.59	0.50	0.54
Advertising	0.59	0.49	0.64
Travel and entertainment	1.09	1.06	0.62
Other selling expenses	1.09	0.80	0.92
TOTAL SELLING EXPENSES	12.84	10.56	11.73

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
2.57%	2.34%	2.81%	2.00%	2.43%	3.12%	2.87%	2.96%
27.63	25.70	29.14	28.90	30.78	25.62	27.98	25.44
3.78	2.03	2.41	2.27	3.94	4.43	4.45	3.52
1.23	1.51	1.54	1.51	1.53	2.03	1.41	1.07
2.41	2.56	2.90	2.58	2.81	2.80	2.54	2.23
3.51	4.18	3.08	2.41	4.19	3.33	4.34	4.80
41.13	38.32	41.88	39.67	45.68	41.33	43.59	40.02
0.92	0.75	0.32	0.36	0.40	0.44	0.51	0.50
5.11	5.24	6.47	6.47	5.46	5.25	6.14	5.90
0.27	0.30	0.42	0.42	0.33	0.24	0.51	0.36
0.23	0.40	0.33	0.08	0.42	0.72	0.10	0.01
0.76	0.74	0.74	0.98	0.62	0.66	0.60	0.44
1.93	1.63	2.02	1.71	1.37	1.89	0.80	0.29
1.88	1.58	2.23	1.84	2.02	2.36	2.50	2.36
0.98	2.61	1.31	0.24	0.95	1.05	0.96	0.66
12.08	13.25	13.84	12.10	11.57	12.61	12.12	10.52
3.00	2.63	3.18	2.30	3.69	3.03	3.85	4.02
1.68	2.38	2.07	2.51	1.56	1.39	0.82	0.26
2.97	3.80	2.94	2.87	2.15	1.81	2.79	2.24
0.99	0.78	1.09	0.57	1.16	0.81	2.05	4.04
8.64	9.59	9.28	8.25	8.56	7.04	9.51	10.56
20.72	22.84	23.12	20.35	20.13	19.65	21.63	21.08
4.61	3.50	3.86	3.77	2.59	2.15	2.60	1.91
4.28	2.41	2.78	2.39	2.48	2.19	3.10	2.97
0.60	0.46	0.49	0.39	0.31	0.30	0.32	0.31
0.84	0.87	0.79	0.55	0.73	1.13	0.89	1.01
0.66	0.73	1.48	0.65	0.75	1.03	0.67	0.10
1.25	0.72	0.46	0.58	0.48	0.43	0.44	0.28
0.90	0.65	0.88	1.09	0.65	0.56	0.75	0.56
0.14	0.14	0.13	0.25	0.18	0.47	0.16	0.21
0.80	0.67	0.65	0.62	0.49	0.65	0.49	0.24
2.59	2.20	2.23	1.37	1.87	0.96	2.30	3.17
16.67	12.35	13.75	11.66	10.53	9.87	11.72	10.76
1.47	0.85	1.61	1.70	1.69	1.33	1.30	0.80
5.12	3.94	6.20	6.26	7.91	5.33	4.73	3.19
1.08	1.04	1.02	1.05	1.21	0.90	1.22	1.02
0.49	0.40	0.46	0.36	0.49	0.37	0.41	0.17
0.62	0.63	0.46	0.43	0.64	0.25	0.76	0.77
0.67	0.58	0.57	0.52	0.55	0.23	0.60	0.55
1.09	0.72	1.19	1.44	1.05	0.98	1.15	0.63
0.44	0.25	1.17	0.54	1.44	1.17	1.01	1.75
10.98	8.41	12.68	12.30	14.98	10.56	11.18	8.88

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	27.22	25.62	23.95
Other chargeable materials	5.25	5.38	4.32
Outside services	8.19	7.53	6.10
TOTAL MATERIALS	40.66	38.53	34.37
FACTORY PAYROLL	25.45	24.36	24.55
FACTORY EXPENSES	12.72	12.87	14.02
TOTAL FACTORY COST OF PRODUCT	78.83	75.76	72.94
GROSS PROFIT	21.17	24.24	27.06
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	7.90	7.01	12.88
Selling expenses	7.61	6.58	7.78
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	15.51	13.59	20.66
INCOME BEFORE INTEREST EXPENSE	5.66	10.65	6.40
Interest expense	2.07	1.55	2.10
OPERATING INCOME	3.59	9.10	4.30
Other income	0.95	1.87	0.13
INCOME BEFORE INCOME TAXES	4.54	10.97	4.43

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
OTHER CHARGEABLE MATERIALS			
Ink	1.95%	1.36%	1.19%
Film	1.09	1.14	1.41
Plates	1.09	1.40	1.10
Other chargeable materials	1.12	1.48	0.62
TOTAL OTHER CHARGEABLE MATERIALS	5.25	5.38	4.32
OUTSIDE SERVICES			
Composition	0.69	1.15	0.48
Offset preparation	1.41	1.65	0.60
Printing	1.26	1.22	1.60
Binding	2.71	1.42	1.78
Other outside services	2.12	2.09	1.64
TOTAL OUTSIDE SERVICES	8.19	7.53	6.10

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
27.15	24.16	26.85	26.38	27.98	28.51	27.86	22.57
3.63	3.88	6.11	5.79	4.93	5.56	6.39	6.05
9.73	9.57	6.71	5.51	9.18	5.86	8.32	11.71
40.51	37.61	39.67	37.68	42.09	39.93	42.57	40.33
24.48	23.87	25.39	24.83	26.62	24.89	24.62	23.31
12.30	14.14	13.87	12.64	11.64	11.81	12.48	12.92
77.29	75.62	78.93	75.15	80.35	76.63	79.67	76.56
22.71	24.38	21.07	24.85	19.65	23.37	20.33	23.44
9.81	7.75	8.21	7.28	6.05	5.90	6.83	6.52
6.61	5.27	7.62	7.60	8.52	6.34	6.68	5.92
16.42	13.02	15.83	14.88	14.57	12.24	13.51	12.44
6.29	11.36	5.24	9.97	5.08	11.13	6.82	11.00
2.09	2.21	2.10	1.33	2.30	2.54	1.51	0.30
4.20	9.15	3.14	8.64	2.78	8.59	5.31	10.70
1.91	4.11	0.86	1.56	0.62	0.89	1.06	0.82
6.11	13.26	4.00	10.20	3.40	9.48	6.37	11.52

0.99%	0.79%	2.12%	1.54%	2.18%	1.51%	2.50%	1.53%
1.08	1.23	1.06	0.97	1.07	1.33	0.99	1.06
0.99	1.42	1.19	1.58	1.03	1.33	1.05	1.02
0.57	0.44	1.74	1.70	0.65	1.39	1.85	2.44
3.63	3.88	6.11	5.79	4.93	5.56	6.39	6.05
1.56	2.37	0.59	0.99	0.59	0.41	0.44	0.34
1.21	0.99	1.24	2.03	2.08	1.02	0.73	0.53
2.81	2.19	0.74	0.70	1.23	1.14	0.70	0.86
1.58	0.61	1.94	0.76	3.79	0.59	3.15	5.80
2.57	3.41	2.20	1.03	1.49	0.70	3.30	4.18
9.73	9.57	6.71	5.51	9.18	5.86	8.32	11.71

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	1.58%	1.48%	1.77%
Direct wages	17.30	16.63	18.29
General factory salaries and wages	1.97	1.70	0.69
Packing, shipping and delivery wages	0.84	0.94	0.40
Payroll taxes	1.63	1.57	1.83
Employee benefits	2.13	2.04	1.57
TOTAL FACTORY PAYROLL	25.45	24.36	24.55
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.27	0.29	0.04
Depreciation - other	3.44	3.58	3.70
Taxes - real estate	0.21	0.22	0.05
Taxes - other	0.18	0.16	0.22
Insurance	0.43	0.49	0.81
Building rent	1.02	0.92	2.17
Utilities - heat, light, etc.	1.26	1.19	1.34
Equipment rental	0.71	0.61	1.56
Total Fixed Expenses	7.52	7.46	9.89
Other Expenses			
Factory supplies and expense	2.00	1.72	1.69
Packing, shipping and delivery expense	0.93	1.13	0.70
Repairs and maintenance	1.55	1.69	1.55
Other factory expenses	0.72	0.87	0.19
Total Other Expenses	5.20	5.41	4.13
TOTAL FACTORY EXPENSES	12.72	12.87	14.02
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.24	1.93	5.90
Salaries - office	1.79	1.46	2.69
Payroll taxes	0.28	0.23	0.70
Employee benefits	0.49	0.48	0.82
Bad debts	0.54	0.40	0.14
Office supplies and expenses	0.36	0.33	0.47
Professional fees	0.47	0.51	0.59
Taxes - business	0.09	0.15	0.10
Telephone	0.35	0.35	0.37
Other administrative expenses	1.29	1.17	1.10
TOTAL ADMINISTRATIVE EXPENSES	7.90	7.01	12.88
SELLING EXPENSES			
Salaries - executive	0.96	0.83	1.58
Salaries and commissions - salesmen	3.74	3.13	3.69
Salaries - sales office clerical	0.65	0.63	0.30
Payroll taxes	0.28	0.21	0.38
Employee benefits	0.35	0.31	0.35
Advertising	0.35	0.30	0.43
Travel and entertainment	0.64	0.65	0.42
Other selling expenses	0.64	0.52	0.63
TOTAL SELLING EXPENSES	7.61	6.58	7.78

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.54%	1.38%	1.70%	1.29%	1.45%	1.88%	1.59%	1.67%
16.30	16.06	17.67	18.06	17.89	15.44	15.93	15.04
2.40	1.32	1.45	1.40	2.30	2.66	2.47	1.97
0.76	0.97	0.94	0.93	0.89	1.22	0.81	0.64
1.42	1.61	1.76	1.63	1.66	1.68	1.42	1.24
2.06	2.53	1.87	1.52	2.43	2.01	2.40	2.75
24.48	23.87	25.39	24.83	26.62	24.89	24.62	23.31
0.56	0.45	0.19	0.22	0.24	0.25	0.30	0.31
2.99	3.22	3.86	4.00	3.14	3.15	3.48	3.42
0.16	0.18	0.25	0.25	0.19	0.15	0.29	0.24
0.14	0.27	0.19	0.05	0.24	0.43	0.06	0.00
0.45	0.45	0.46	0.64	0.35	0.40	0.36	0.27
1.19	1.03	1.21	1.07	0.79	1.17	0.44	0.18
1.11	0.98	1.35	1.16	1.17	1.42	1.39	1.31
0.60	1.56	0.81	0.18	0.57	0.64	0.58	0.47
7.20	8.14	8.32	7.57	6.69	7.61	6.90	6.20
1.74	1.67	1.91	1.43	2.17	1.80	2.24	2.40
0.99	1.43	1.21	1.51	0.90	0.83	0.45	0.11
1.73	2.32	1.77	1.78	1.23	1.10	1.55	1.27
0.64	0.58	0.66	0.35	0.65	0.47	1.34	2.94
5.10	6.00	5.55	5.07	4.95	4.20	5.58	6.72
12.30	14.14	13.87	12.64	11.64	11.81	12.48	12.92
2.75	2.11	2.34	2.43	1.48	1.30	1.48	1.12
2.42	1.45	1.65	1.47	1.43	1.30	1.79	1.62
0.35	0.28	0.29	0.24	0.18	0.18	0.18	0.16
0.49	0.52	0.48	0.35	0.42	0.68	0.52	0.57
0.41	0.51	0.86	0.39	0.43	0.60	0.38	0.06
0.75	0.45	0.27	0.36	0.27	0.25	0.25	0.18
0.53	0.41	0.53	0.68	0.38	0.34	0.44	0.37
0.08	0.09	0.08	0.15	0.10	0.28	0.09	0.13
0.47	0.41	0.39	0.38	0.28	0.39	0.28	0.14
1.56	1.52	1.32	0.83	1.08	0.58	1.42	2.17
9.81	7.75	8.21	7.28	6.05	5.90	6.83	6.52
0.89	0.50	0.96	1.12	0.97	0.81	0.76	0.52
3.10	2.58	3.74	3.82	4.50	3.23	2.81	1.99
0.64	0.60	0.61	0.64	0.71	0.53	0.73	0.70
0.30	0.26	0.28	0.22	0.28	0.22	0.24	0.11
0.38	0.39	0.28	0.27	0.37	0.15	0.45	0.50
0.40	0.35	0.34	0.32	0.31	0.13	0.37	0.39
0.64	0.44	0.71	0.87	0.59	0.58	0.69	0.45
0.26	0.15	0.70	0.34	0.79	0.69	0.63	1.26
6.61	5.27	7.62	7.60	8.52	6.34	6.68	5.92

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	4.18%	5.74%	7.30%
Receivables	30.95	29.61	35.59
Inventories	14.40	13.19	11.96
Other current assets	3.24	5.22	5.81
TOTAL CURRENT ASSETS	52.77	53.76	60.66
FIXED ASSETS			
Real estate	11.21	11.75	8.23
Less: Accumulated depreciation	3.14	3.04	4.61
	8.07	8.71	3.62
Machinery and equipment	66.49	61.96	100.16
Less: Accumulated depreciation	33.36	32.14	67.03
	33.13	29.82	33.13
Other fixed assets	4.87	4.12	2.64
Less: Accumulated depreciation	2.73	2.45	1.93
	2.14	1.67	0.71
NET FIXED ASSETS	43.34	40.20	37.46
OTHER ASSETS	3.89	6.04	1.88
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	10.11	6.87	11.34
Accounts payable	13.69	11.26	12.13
Other current liabilities	7.60	7.61	4.44
TOTAL CURRENT LIABILITIES	31.40	25.74	27.91
LONG-TERM LIABILITIES	31.35	22.29	36.93
TOTAL LIABILITIES	62.75	48.03	64.84
SHAREHOLDERS' AND PROPRIETORS' EQUITY	37.25	51.97	35.16
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.68	2.09	2.17
QUICK RATIO	1.22	1.58	1.74
TOTAL LIABILITIES TO EQUITY	1.68	0.92	1.84
LONG-TERM LIABILITIES TO EQUITY	0.84	0.43	1.05
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.50	0.52	0.67

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
2.55%	(1.67)%	4.54%	9.38%	3.61%	3.05%	5.13%	8.59%
29.15	28.24	32.42	33.36	31.02	29.07	27.73	22.52
14.94	11.93	15.92	12.87	12.91	11.47	14.78	17.26
6.60	15.91	1.65	1.85	2.40	0.89	3.52	4.61
53.24	54.41	54.53	57.46	49.94	44.48	51.16	52.98
12.07	12.36	9.39	11.24	12.61	8.81	12.41	15.20
2.91	1.78	3.05	3.90	3.18	1.77	2.90	3.71
9.16	10.58	6.34	7.34	9.43	7.04	9.51	11.49
61.10	51.07	69.06	72.44	62.62	59.42	61.03	51.92
32.68	27.65	35.32	40.39	27.42	20.66	28.26	28.62
28.42	23.42	33.74	32.05	35.20	38.76	32.77	23.30
7.10	5.02	4.88	5.20	3.98	3.07	5.14	1.37
4.16	3.04	2.58	3.14	2.17	1.39	2.95	1.10
2.94	1.98	2.30	2.06	1.81	1.68	2.19	0.27
40.52	35.98	42.38	41.45	46.44	47.48	44.47	35.06
6.24	9.61	3.09	1.09	3.62	8.04	4.37	11.96
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
8.50	6.78	9.01	7.07	12.11	7.04	9.51	6.29
15.34	10.67	14.54	12.78	12.74	8.53	12.60	10.95
4.53	3.82	10.10	9.14	7.54	9.00	7.26	7.12
28.37	21.27	33.65	28.99	32.39	24.57	29.37	24.36
32.30	27.95	30.37	17.66	35.77	39.39	20.51	9.68
60.67	49.22	64.02	46.65	68.16	63.96	49.88	34.04
39.33	50.78	35.98	53.35	31.84	36.04	50.12	65.96
100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

1.88	2.56	1.62	1.98	1.54	1.81	1.74	2.17
1.35	2.00	1.15	1.54	1.14	1.34	1.24	1.47
1.54	0.97	1.78	0.87	2.14	1.77	1.00	0.52
0.82	0.55	0.84	0.33	1.12	1.09	0.41	0.15
0.53	0.54	0.51	0.56	0.44	0.35	0.46	0.55

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 51,864	$ 53,715	$ 22,531
Average assets per factory employee (Excluding Executives)	68,847	68,690	36,453
Average net worth per employee - All employees	19,829	28,664	9,240
Average gross plant investment per factory employee (Excluding Executives)	55,319	52,123	38,147
Net worth percentage of fixed assets	104.09%	172.74%	112.38%
EMPLOYEES			
Percent factory - All employees	78.98%	81.78%	68.29%
Percent administrative - All employees	10.71	9.37	18.40
Percent sales - All employees	10.31	8.85	13.31
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 91,161	$ 87,284	$ 56,049
Sales per factory employee	116,289	107,619	84,136
Sales less material per factory employee	67,799	65,770	55,709
Sales per administrative employee	1,068,224	1,073,251	322,060
EXCLUDING EXECUTIVES			
Sales per employee - All employees	98,143	93,858	66,855
Sales per factory employee	121,668	112,547	90,171
Sales less material per factory employee	70,949	68,730	59,759
SALES PER SALESMAN	984,283	1,051,914	335,958
SALES TO CURRENT ASSETS	373%	346%	441%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	36.23%	33.58%	40.97%
Factory payroll percentage of gross plant investment	64.72	59.97	59.32
Payroll per employee - All employees	$ 32,250	$ 28,981	$ 23,091
Payroll per factory employee	28,538	25,779	20,367
Payroll per administrative employee	41,240	40,478	31,106
Payroll per sales employee	55,777	50,791	29,587
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 25,080	$ 22,648	$ 17,132
Payroll per factory employee	23,424	21,188	16,812
Payroll per administrative employee	19,865	19,617	16,256
Payroll per sales employee	43,404	41,470	14,393
EXECUTIVE PAYROLL			
Payroll per executive - All executives	67,199	59,307	35,223
Payroll per factory executive	42,262	38,213	23,206
Payroll per administrative executive	83,895	76,486	39,804
Payroll per sales executive	67,158	52,112	34,462
RECEIVABLES			
Collection period	62.1	63.5	52.6
PROFIT			
Gross profit percentage of sales	21.17%	24.24%	27.06%
Average gross profit per factory employee	$ 25,898	$ 27,407	$ 24,833
Income before taxes percentage of sales	4.54%	10.97%	4.43%
Average income before taxes per employee	$ 4,186	$ 9,639	$ 2,440

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 42,427	$ 50,853	$ 45,340	$ 45,640	$ 62,267	$ 58,882	$ 66,909	$ 72,310
58,470	66,144	60,095	58,970	81,215	71,730	86,842	93,133
16,228	24,568	16,705	24,006	19,881	21,117	35,063	52,977
46,800	45,533	51,592	53,154	62,314	51,726	65,411	58,177
141.08%	227.39%	100.87%	156.54%	72.89%	83.29%	132.04%	234.35%
75.91%	80.15%	79.77%	81.19%	81.06%	86.58%	80.95%	80.46%
13.93	10.24	10.39	9.66	8.02	6.30	10.17	10.65
10.16	9.61	9.84	9.15	10.92	7.12	8.88	8.89
$ 77,818	$ 87,709	$ 84,334	$ 79,916	$ 103,672	$ 82,723	$ 109,281	$ 109,737
103,152	111,181	107,473	99,225	129,553	95,574	135,552	136,199
60,689	69,159	63,801	61,601	73,311	57,461	77,858	30,256
657,794	1,026,795	944,525	855,987	1,424,923	1,357,642	1,357,787	1,390,092
84,224	95,867	91,116	85,300	110,170	88,529	116,638	118,069
107,372	116,383	112,719	102,861	134,991	101,155	142,132	143,357
63,207	72,227	66,852	63,918	76,486	60,844	81,506	84,273
469,495	614,624	868,671	947,944	1,147,156	1,585,439	1,709,671	1,270,166
394%	394%	378%	333%	359%	338%	339%	326%
35.79%	32.57%	36.02%	35.39%	36.96%	33.28%	33.58%	30.61%
68.26	74.49	70.33	54.94	62.34	54.04	56.04	60.34
$ 27,285	$ 28,628	$ 29,873	$ 28,242	$ 37,204	$ 27,692	$ 36,327	$ 32,561
24,688	26,261	26,358	24,229	32,405	23,989	32,824	30,843
34,069	41,053	40,940	37,501	44,666	47,815	47,081	39,863
43,443	50,088	54,858	54,827	66,648	57,106	59,774	35,267
$ 21,161	$ 21,999	$ 23,108	$ 22,346	$ 29,393	$ 21,637	$ 27,949	$ 25,224
20,306	20,945	21,650	20,519	26,624	19,591	26,768	24,760
18,764	22,380	17,919	16,363	22,015	22,151	22,236	21,765
34,539	40,056	41,805	46,191	54,296	46,147	46,055	26,759
52,797	46,943	64,722	68,064	76,802	60,256	82,094	51,921
38,662	29,387	40,346	38,330	45,727	40,809	51,223	46,359
57,900	48,928	78,312	87,945	89,792	91,094	131,823	67,679
34,331	12,499	53,839	55,246	90,496	71,102	97,220	74,800
54.8	57.8	64.0	68.0	66.3	72.9	61.4	49.9
22.71%	24.38%	21.07%	24.85%	19.65%	23.37%	20.33%	23.44%
$ 24,407	$ 28,578	$ 23,901	$ 25,975	$ 27,301	$ 23,562	$ 29,329	$ 33,370
6.11%	13.26%	4.00%	10.20%	3.40%	9.48%	6.37%	11.52%
$ 5,101	$ 11,572	$ 3,369	$ 8,128	$ 3,578	$ 7,865	$ 6,944	$ 12,773

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO 1.5 MILLION**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 2.71	$ 3.74	$ 3.27
Receivables	16.43	16.79	13.82
Inventories	7.73	7.87	4.74
Marketable securities	0.72	0.56	1.62
Other current assets	1.22	2.99	0.81
	28.81	31.95	24.26
Plant Investment:			
Land and building	7.17	8.11	2.91
Machinery and equipment	36.79	37.52	40.09
Other fixed assets	2.59	2.36	1.03
	46.55	47.99	44.03
Non-Current Assets	2.31	4.01	0.80
TOTAL INVESTMENT	77.67	83.95	69.09
INVESTMENT TURNOVER PER $100 OF SALES	128.75%	119.12%	144.74%
EARNINGS			
Cost of Product	$78.83	$75.76	$72.94
Selling Expenses	7.61	6.58	7.78
Administrative Expenses	7.90	7.01	12.88
	94.34	89.35	93.60
Income Before Interest, Other Income, and Taxes	5.66	10.65	6.40
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.29%	12.69%	9.26%

** Sample insufficient for Profit Leaders.

SALES FROM $1.5 TO $5 MILLION		SALES FROM $5 TO $10 MILLION		SALES FROM $10 TO $20 MILLION		SALES OVER $20 MILLION	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 1.11	$(1.79)	$ 3.21	$ 6.30	$ 2.63	$ 2.29	$ 3.41	$ 5.73
14.67	15.23	16.77	17.92	17.65	19.58	16.20	13.14
7.73	6.50	7.76	7.04	7.59	7.80	9.23	11.72
0.35	0.00	0.33	0.42	0.79	0.00	1.45	2.14
3.87	10.68	0.65	0.97	0.61	0.65	0.88	0.78
27.73	30.62	28.72	32.65	29.27	30.32	31.17	33.51
7.96	9.54	5.58	7.57	8.97	7.10	7.63	8.66
32.34	29.84	38.09	41.80	37.27	42.62	36.62	31.31
3.81	2.79	2.52	2.98	2.25	1.82	2.73	0.80
44.11	42.17	46.19	52.35	48.49	51.54	46.98	40.77
3.36	4.90	1.59	0.60	2.39	6.26	3.23	9.20
75.20	77.69	76.50	85.60	80.15	88.12	81.38	83.48
132.98%	128.72%	130.72%	116.82%	124.77%	113.48%	122.88%	119.79%
$77.29	$75.62	$78.93	$75.15	$80.35	$76.63	$79.67	$76.56
6.61	5.27	7.62	7.60	8.52	6.34	6.68	5.92
9.81	7.75	8.21	7.28	6.05	5.90	6.83	6.52
93.71	88.64	94.76	90.03	94.92	88.87	93.18	89.00
6.29	11.36	5.24	9.97	5.08	11.13	6.82	11.00
8.36%	14.62%	6.85%	11.65%	6.34%	12.63%	8.38%	13.18%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	42.85	39.53	44.86	36.55
FACTORY EXPENSES	21.45	19.61	20.80	20.32
TOTAL FACTORY COST OF PRODUCT	64.30	59.14	65.66	56.87
GROSS PROFIT	35.70	40.86	34.34	43.13
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	13.42	10.33	11.73	12.62
Selling expenses	14.01	13.47	8.73	8.89
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	27.43	23.80	20.46	21.51
INCOME BEFORE INTEREST EXPENSE	8.27	17.06	13.88	21.62
Interest expense	3.44	1.92	3.44	3.66
OPERATING INCOME	4.83	15.14	10.44	17.96
Other income	1.23	0.98	5.70	11.06
INCOME BEFORE INCOME TAXES	6.06	16.12	16.14	29.02

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
X	X	X	X	X
X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%
43.03	31.27	42.20	42.82	45.89
19.72	23.27	22.32	21.67	20.48
62.75	54.54	64.52	64.49	66.37
37.25	45.46	35.48	35.51	33.63
13.87	13.08	13.19	11.53	14.56
5.86	11.79	8.51	8.07	14.28
19.73	24.87	21.70	19.60	28.84
17.52	20.59	13.78	15.91	4.79
4.38	2.31	3.71	3.26	4.21
13.14	18.28	10.07	12.65	0.58
1.15	0.32	2.76	3.54	0.74
14.29	18.60	12.83	16.19	1.32

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.78%	2.93%	2.21%	2.74%
Direct wages	28.73	26.75	30.88	23.22
General factory salaries and wages	3.49	2.71	3.74	3.79
Packing, shipping and delivery wages	1.46	1.52	1.05	1.39
Payroll taxes	2.72	2.72	3.12	2.63
Employee benefits	3.67	2.90	3.86	2.78
TOTAL FACTORY PAYROLL	42.85	39.53	44.86	36.55
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.33	0.26	0.40	0.63
Depreciation - other	5.71	5.58	6.15	5.12
Taxes - real estate	0.36	0.45	0.16	0.14
Taxes - other	0.32	0.20	0.29	0.43
Insurance	0.73	0.78	0.36	0.30
Building rent	1.94	2.28	0.71	0.47
Utilities - heat, light, etc.	2.13	1.96	2.21	2.57
Equipment rental	1.34	0.95	1.61	2.80
Total Fixed Expenses	12.86	12.46	11.89	12.46
Other Expenses				
Factory supplies and expense	3.32	1.80	4.26	3.94
Packing, shipping and delivery expense	1.63	2.21	0.83	0.94
Repairs and maintenance	2.62	2.49	1.92	2.03
Other factory expenses	1.02	0.65	1.90	0.95
Total Other Expenses	8.59	7.15	8.91	7.86
TOTAL FACTORY EXPENSES	21.45	19.61	20.80	20.32
ADMINISTRATIVE EXPENSES				
Salaries - executive	4.00	3.31	2.78	3.48
Salaries - office	2.91	2.13	3.14	3.96
Payroll taxes	0.46	0.35	0.40	0.59
Employee benefits	0.85	0.63	0.75	0.89
Bad debts	0.92	0.60	1.64	0.98
Office supplies and expenses	0.62	0.52	0.46	0.65
Professional fees	0.79	0.87	0.50	0.39
Taxes - business	0.12	0.22	0.09	0.03
Telephone	0.56	0.55	0.73	0.71
Other administrative expenses	2.19	1.15	1.24	0.94
TOTAL ADMINISTRATIVE EXPENSES	13.42	10.33	11.73	12.62
SELLING EXPENSES				
Salaries - executive	1.70	1.87	1.07	1.16
Salaries and commissions - salesmen	7.14	7.19	3.22	3.39
Salaries - sales office clerical	1.12	1.12	1.24	1.14
Payroll taxes	0.51	0.45	0.36	0.41
Employee benefits	0.62	0.61	0.44	0.25
Advertising	0.63	0.54	0.71	0.69
Travel and entertainment	1.11	1.01	0.98	1.05
Other selling expenses	1.18	0.68	0.71	0.80
TOTAL SELLING EXPENSES	14.01	13.47	8.73	8.89

** Sample insufficient for Profit Leaders.

**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
0.43%	0.67%	2.52%	2.11%	3.83%
31.84	23.65	29.05	29.19	28.77
0.96	2.13	3.10	3.22	3.69
1.94	1.45	1.05	1.40	2.03
2.77	1.56	2.69	2.61	3.63
5.09	1.81	3.79	4.29	3.94
43.03	31.27	42.20	42.82	45.89
1.67	0.22	0.39	0.45	2.35
5.23	4.77	7.12	7.02	5.19
0.65	0.29	0.20	0.25	0.81
0.24	0.45	0.23	0.13	0.29
0.65	0.40	0.70	0.77	0.63
0.00	1.26	1.32	1.05	1.41
3.02	1.34	1.85	1.70	2.47
0.09	1.52	0.16	0.22	0.36
11.55	10.25	11.97	11.59	13.51
2.30	3.02	3.98	3.96	2.29
1.72	(0.25)	2.40	2.72	1.00
4.02	1.95	3.16	2.99	2.43
0.13	8.30	0.81	0.41	1.25
8.17	13.02	10.35	10.08	6.97
19.72	23.27	22.32	21.67	20.48
4.64	2.30	2.03	2.33	4.42
2.57	1.17	4.10	2.71	3.88
1.08	0.18	0.47	0.37	0.67
1.14	0.28	0.99	1.21	0.59
0.47	1.17	0.95	0.57	0.34
0.69	0.54	0.60	0.53	0.86
1.16	0.68	0.75	0.76	0.95
0.34	0.04	0.48	0.46	0.07
1.00	0.35	0.63	0.60	0.77
0.78	6.37	2.19	1.99	2.01
13.87	13.08	13.19	11.53	14.56
3.03	0.35	0.92	0.90	2.74
0.00	5.61	3.98	3.37	6.19
0.20	0.87	1.13	1.11	1.17
0.23	0.29	0.24	0.18	0.76
0.75	0.53	0.28	0.36	0.91
0.92	0.75	0.12	0.15	0.59
0.40	1.00	1.32	1.38	0.93
0.33	2.39	0.52	0.62	0.99
5.86	11.79	8.51	8.07	14.28

REPORT ON OPERATIONS - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	27.53	26.43	23.84	28.51
Other chargeable materials	5.02	5.49	9.28	5.68
Outside services	8.29	6.74	7.80	13.70
TOTAL MATERIALS	40.84	38.66	40.92	47.89
FACTORY PAYROLL	25.28	24.18	26.95	18.90
FACTORY EXPENSES	12.70	12.02	12.38	10.68
TOTAL FACTORY COST OF PRODUCT	78.82	74.86	80.25	77.47
GROSS PROFIT	21.18	25.14	19.75	22.53
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	7.97	6.35	6.96	6.67
Selling expenses	8.26	8.30	5.36	5.10
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	16.23	14.65	12.32	11.77
INCOME BEFORE INTEREST EXPENSE	4.95	10.49	7.43	10.76
Interest expense	2.02	1.17	2.15	2.10
OPERATING INCOME	2.93	9.32	5.28	8.66
Other income	0.68	0.55	3.33	6.40
INCOME BEFORE INCOME TAXES	3.61	9.87	8.61	15.06

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS				
Ink	2.03%	1.73%	2.69%	1.55%
Film	1.07	1.30	2.06	1.28
Plates	0.98	1.47	2.48	1.26
Other chargeable materials	0.94	0.99	2.05	1.59
TOTAL OTHER CHARGEABLE MATERIALS	5.02	5.49	9.28	5.68
OUTSIDE SERVICES				
Composition	0.78	1.67	0.36	0.70
Offset preparation	1.52	2.04	1.64	2.50
Printing	1.26	0.50	2.34	4.46
Binding	2.65	1.40	0.42	0.40
Other outside services	2.08	1.13	3.04	5.64
TOTAL OUTSIDE SERVICES	8.29	6.74	7.80	13.70

** Sample insufficient for Profit Leaders.
*** Information not submitted.
**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%	100.00%
30.34	10.93	29.43	28.32	29.18
5.17	3.80	5.10	5.59	4.12
4.65	8.97	10.27	6.14	6.18
40.16	23.70	44.80	40.05	39.48
25.72	23.86	23.59	25.81	27.91
11.85	17.76	12.09	12.90	12.34
77.73	65.32	80.48	78.76	79.73
22.27	34.68	19.52	21.24	20.27
8.28	9.98	7.08	6.92	8.79
3.50	8.99	4.67	4.82	8.52
11.78	18.97	11.75	11.74	17.31
10.49	15.71	7.77	9.50	2.96
2.61	1.77	2.00	1.92	2.49
7.88	13.94	5.77	7.58	0.47
0.70	0.25	1.59	2.10	0.48
8.58	14.19	7.36	9.68	0.95

NEWSPAPER**	FINANCIAL****	BOOK ALL FIRMS	BOOK PROFIT LEADERS	NO PREDOMINANT PRODUCT**
1.19%	0.17%	0.83%	0.91%	1.89%
2.12	0.03	1.03	1.06	0.45
1.20	0.36	1.67	1.82	0.72
0.66	3.24	1.57	1.80	1.06
5.17	3.80	5.10	5.59	4.12
0.08		0.23	0.27	0.31
0.87		0.36	0.20	0.74
2.49		0.40	0.52	0.83
0.45		7.24	2.19	0.29
0.76		2.04	2.96	4.01
4.65	***	10.27	6.14	6.18

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	1.67%	1.80%	1.23%	1.40%
Direct wages	16.94	16.37	18.83	12.07
General factory salaries and wages	2.06	1.66	2.13	1.95
Packing, shipping and delivery wages	0.86	0.93	0.60	0.76
Payroll taxes	1.61	1.66	1.89	1.39
Employee benefits	2.14	1.76	2.27	1.33
TOTAL FACTORY PAYROLL	25.28	24.18	26.95	18.90
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.19	0.15	0.23	0.35
Depreciation - other	3.37	3.44	3.62	2.54
Taxes - real estate	0.21	0.27	0.10	0.08
Taxes - other	0.19	0.12	0.17	0.24
Insurance	0.43	0.49	0.23	0.17
Building rent	1.18	1.42	0.43	0.27
Utilities - heat, light, etc.	1.25	1.20	1.26	1.29
Equipment rental	0.83	0.60	0.95	1.63
Total Fixed Expenses	7.65	7.69	6.99	6.57
Other Expenses				
Factory supplies and expense	1.97	1.10	2.54	2.07
Packing, shipping and delivery expense	0.96	1.34	0.49	0.53
Repairs and maintenance	1.54	1.50	1.11	0.99
Other factory expenses	0.58	0.39	1.25	0.52
Total Other Expenses	5.05	4.33	5.39	4.11
TOTAL FACTORY EXPENSES	12.70	12.02	12.38	10.68
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.39	2.08	1.65	1.87
Salaries - office	1.74	1.30	1.78	2.00
Payroll taxes	0.27	0.21	0.23	0.31
Employee benefits	0.50	0.38	0.42	0.43
Bad debts	0.53	0.36	1.04	0.56
Office supplies and expenses	0.37	0.31	0.27	0.37
Professional fees	0.47	0.54	0.31	0.23
Taxes - business	0.07	0.13	0.06	0.01
Telephone	0.34	0.34	0.44	0.39
Other administrative expenses	1.29	0.70	0.76	0.50
TOTAL ADMINISTRATIVE EXPENSES	7.97	6.35	6.96	6.67
SELLING EXPENSES				
Salaries - executive	1.01	1.23	0.64	0.67
Salaries and commissions - salesmen	4.22	4.37	1.99	1.95
Salaries - sales office clerical	0.66	0.68	0.75	0.65
Payroll taxes	0.31	0.28	0.22	0.23
Employee benefits	0.36	0.38	0.27	0.15
Advertising	0.37	0.33	0.44	0.40
Travel and entertainment	0.65	0.61	0.61	0.60
Other selling expenses	0.68	0.42	0.44	0.45
TOTAL SELLING EXPENSES	8.26	8.30	5.36	5.10

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
0.26%	0.51%	1.41%	1.28%	2.31%
18.98	18.06	16.05	17.52	17.51
0.58	1.62	1.84	1.97	2.21
1.17	1.10	0.63	0.84	1.25
1.65	1.19	1.50	1.58	2.24
3.08	1.38	2.16	2.62	2.39
25.72	23.86	23.59	25.81	27.91
1.01	0.17	0.23	0.27	1.45
3.17	3.64	3.83	4.13	3.05
0.39	0.22	0.12	0.15	0.48
0.14	0.34	0.12	0.08	0.19
0.39	0.31	0.40	0.46	0.38
0.00	0.96	0.67	0.61	0.86
1.79	1.02	1.00	1.02	1.46
0.05	1.16	0.10	0.14	0.22
6.94	7.82	6.47	6.86	8.09
1.38	2.30	2.19	2.41	1.39
1.04	(0.19)	1.32	1.60	0.61
2.41	1.49	1.71	1.79	1.43
0.08	6.34	0.40	0.24	0.82
4.91	9.94	5.62	6.04	4.25
11.85	17.76	12.09	12.90	12.34
2.75	1.75	1.17	1.40	2.63
1.54	0.89	2.09	1.64	2.37
0.64	0.14	0.24	0.22	0.40
0.68	0.21	0.58	0.74	0.35
0.28	0.89	0.46	0.33	0.21
0.41	0.41	0.41	0.45	0.57
0.70	0.52	0.32	0.32	0.52
0.21	0.03	0.27	0.27	0.05
0.60	0.27	0.33	0.35	0.47
0.47	4.87	1.21	1.20	1.22
8.28	9.98	7.08	6.92	8.79
1.80	0.27	0.50	0.54	1.67
0.00	4.28	2.08	1.98	3.69
0.12	0.67	0.68	0.68	0.68
0.14	0.22	0.13	0.11	0.46
0.45	0.40	0.17	0.22	0.53
0.55	0.57	0.07	0.09	0.36
0.24	0.76	0.73	0.82	0.57
0.20	1.82	0.31	0.38	0.56
3.50	8.99	4.67	4.82	8.52

BALANCE SHEET

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	3.93%	5.29%	1.88%	3.70%
Receivables	32.20	36.39	27.78	26.30
Inventories	14.76	14.07	15.63	17.02
Other current assets	2.73	2.09	1.65	0.52
TOTAL CURRENT ASSETS	53.62	57.84	46.94	47.54
FIXED ASSETS				
Real estate	9.51	8.09	11.00	8.70
Less: Accumulated depreciation	2.60	2.87	3.27	0.35
	6.91	5.22	7.73	8.35
Machinery and equipment	66.64	65.90	67.66	42.87
Less: Accumulated depreciation	32.85	34.49	32.84	18.02
	33.79	31.41	34.82	24.85
Other fixed assets	5.29	5.35	3.10	3.56
Less: Accumulated depreciation	2.92	3.07	2.34	2.75
	2.37	2.28	0.76	0.81
NET FIXED ASSETS	43.07	38.91	43.31	34.01
OTHER ASSETS	3.31	3.25	9.75	18.45
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	10.93	6.67	7.67	8.08
Accounts payable	13.69	11.73	10.25	8.74
Other current liabilities	8.11	9.00	7.13	4.13
TOTAL CURRENT LIABILITIES	32.73	27.40	25.05	20.95
LONG-TERM LIABILITIES	30.50	17.54	27.29	14.95
TOTAL LIABILITIES	63.23	44.94	52.34	35.90
SHAREHOLDERS' AND PROPRIETORS' EQUITY	36.77	55.06	47.66	64.10
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.64	2.11	1.87	2.27
QUICK RATIO	1.19	1.60	1.25	1.46
TOTAL LIABILITIES TO EQUITY	1.72	0.82	1.10	0.56
LONG-TERM LIABILITIES TO EQUITY	0.83	0.32	0.57	0.23
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.49	0.52	0.49	0.42

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
(6.40)%	0.00%	5.53%	7.19%	8.56%
37.27	18.52	30.16	27.88	25.45
8.27	10.64	14.51	12.98	13.36
3.07	33.78	2.02	2.67	1.45
42.21	62.94	52.22	50.72	48.82
52.38	10.78	10.31	11.49	20.79
18.21	2.49	3.04	3.73	5.22
34.17	8.29	7.27	7.76	15.57
80.73	57.40	61.71	67.67	74.84
62.12	32.92	28.90	34.06	44.23
18.61	24.48	32.81	33.61	30.61
4.83	3.50	3.24	3.19	5.57
2.61	2.23	1.67	1.81	3.67
2.22	1.27	1.57	1.38	1.90
55.00	34.04	41.65	42.75	48.08
2.79	3.02	6.13	6.53	3.10
100.00	100.00	100.00	100.00	100.00
7.38	11.47	8.18	6.85	3.53
18.76	13.73	16.66	12.09	12.13
0.00	2.46	9.65	11.24	4.89
26.14	27.66	34.49	30.18	20.55
55.17	31.63	31.46	30.83	41.03
81.31	59.29	65.95	61.01	61.58
18.69	40.71	34.05	38.99	38.42
100.00	100.00	100.00	100.00	100.00
1.61	2.28	1.51	1.68	2.38
1.30	1.89	1.09	1.25	1.73
4.35	1.46	1.94	1.56	1.60
2.95	0.78	0.92	0.79	1.07
0.77	0.57	0.47	0.50	0.59

SIGNIFICANT FACTS

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 52,241	$ 47,532	$ 59,170	$ 74,573
Average assets per factory employee (Excluding Executives)	69,957	61,636	74,536	98,430
Average net worth per employee - All employees	19,251	25,673	32,785	52,708
Average gross plant investment per factory employee (Excluding Executives)	56,504	49,840	51,492	49,400
Net worth percentage of fixed assets	97.52%	165.95%	191.61%	321.31%
EMPLOYEES				
Percent factory - All employees	78.26%	81.21%	82.47%	77.82%
Percent administrative - All employees	10.62	8.44	9.58	12.91
Percent sales - All employees	11.12	10.35	7.95	9.27
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 94,672	$ 90,390	$ 85,053	$ 99,402
Sales per factory employee	121,269	111,609	104,929	128,752
Sales less material per factory employee	70,621	68,152	59,634	65,567
Sales per administrative employee	1,143,796	1,231,875	1,061,070	959,798
EXCLUDING EXECUTIVES				
Sales per employee - All employees	102,027	96,960	91,379	109,291
Sales per factory employee	126,962	117,304	109,428	135,983
Sales less material per factory employee	74,002	71,642	62,024	69,232
SALES PER SALESMAN	948,719	1,061,977	1,058,361	852,586
SALES TO CURRENT ASSETS	374%	349%	360%	316%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	36.75%	35.08%	34.90%	27.16%
Factory payroll percentage of gross plant investment	67.42	65.01	59.34	56.77
Payroll per employee - All employees	$ 34,043	$ 31,724	$ 27,941	$ 25,807
Payroll per factory employee	29,787	27,106	26,130	23,925
Payroll per administrative employee	43,464	43,801	39,054	38,369
Payroll per sales employee	59,683	61,520	34,190	22,648
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 26,352	$ 24,532	$ 22,146	$ 20,192
Payroll per factory employee	24,401	22,201	21,552	19,586
Payroll per administrative employee	19,915	18,804	23,623	24,278
Payroll per sales employee	46,412	49,588	28,043	19,225
EXECUTIVE PAYROLL				
Payroll per executive - All executives	72,237	74,055	52,279	42,468
Payroll per factory executive	44,904	47,209	31,622	35,727
Payroll per administrative executive	93,262	100,598	62,324	54,629
Payroll per sales executive	74,459	76,705	44,153	30,667
RECEIVABLES				
Collection period	63.0	68.1	63.7	61.9
PROFIT				
Gross profit percentage of sales	21.18%	25.14%	19.75%	22.53%
Average gross profit per factory employee	$ 27,020	$ 29,062	$ 21,937	$ 29,755
Income before taxes percentage of sales	3.61%	9.87%	8.61%	15.06%
Average income before taxes per employee	$ 3,535	$ 8,912	$ 8,158	$ 14,725

** Sample insufficient for Profit Leaders.

**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 39,134	$ 56,029	$ 49,025	$ 49,031	$ 42,072
46,938	73,522	63,529	60,530	60,642
16,093	22,286	16,312	18,405	13,225
56,892	52,454	46,569	49,102	60,928
15.41%	162.85%	99.40%	119.69%	101.95%
84.58%	77.21%	82.10%	84.92%	74.75%
11.40	9.94	11.27	8.43	12.74
4.02	12.85	6.63	6.65	12.51
$ 59,741	$ 96,126	$ 85,948	$ 77,507	$ 75,380
70,606	126,152	106,782	91,255	103,278
42,445	96,262	56,812	54,779	61,412
536,785	1,108,698	877,959	986,030	632,829
65,147	101,523	91,917	82,534	81,776
71,484	128,057	112,565	95,300	108,956
42,978	97,715	59,871	57,235	64,670
600,000	563,522	1,440,474	1,214,702	752,509
512%	338%	362%	351%	418%
33.85%	32.69%	31.24%	33.34%	40.70%
36.95	68.34	60.12	58.52	55.35
$ 19,396	$ 31,205	$ 26,042	$ 25,858	$ 30,256
17,820	29,368	23,671	23,491	27,666
25,664	32,954	35,982	40,093	32,284
34,663	48,637	48,718	45,738	45,555
$ 13,929	$ 26,763	$ 20,601	$ 20,033	$ 22,354
14,011	26,004	19,239	18,982	21,888
13,912	15,816	20,704	20,428	15,530
5,161	42,603	42,897	39,328	30,630
27,317	47,480	45,758	54,339	79,639
13,871	45,016	24,833	24,613	75,942
26,528	47,037	55,651	68,206	88,105
28,998	27,256	42,722	42,835	79,307
69.2	42.0	65.4	66.7	47.2
22.27%	34.68%	19.52%	21.24%	20.27%
$ 15,535	$ 44,631	$ 21,702	$ 20,611	$ 22,188
8.58%	14.19%	7.36%	9.68%	0.95%
$ 5,587	$ 13,697	$ 5,992	$ 7,474	$ 418

RETURN ON INVESTMENT - PER $100 OF SALES

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 2.54	$ 2.64	$ 1.65	$ 3.28
Receivables	16.74	18.33	16.68	16.48
Inventories	7.67	7.33	9.96	12.56
Marketable securities	0.84	0.86	0.45	0.00
Other current assets	0.67	0.42	0.38	0.28
	28.46	29.58	29.12	32.60
Plant Investment:				
Land and building	6.05	5.09	7.88	7.33
Machinery and equipment	35.74	33.92	43.14	31.97
Other fixed assets	2.77	2.87	1.62	1.78
	44.56	41.88	52.64	41.08
Non-Current Assets	1.80	1.61	7.22	13.63
TOTAL INVESTMENT	74.82	73.07	88.98	87.31
INVESTMENT TURNOVER PER $100 OF SALES	133.65%	136.86%	112.38%	114.53%
EARNINGS				
Cost of Product	$78.82	$74.86	$80.25	$77.47
Selling Expenses	8.26	8.30	5.36	5.10
Administrative Expenses	7.97	6.35	6.96	6.67
	95.05	89.51	92.57	89.24
Income Before Interest, Other Income, and Taxes	4.95	10.49	7.43	10.76
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.62%	14.36%	8.35%	12.32%

** Sample insufficient for Profit Leaders.
**** All firms are the same as Profit Leaders.

NEWSPAPER**	FINANCIAL****	BOOK		NO PREDOMINANT PRODUCT**
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$(5.45)	$ 0.00	$ 2.94	$ 3.87	$ 4.14
18.12	10.42	16.91	17.24	12.74
4.68	5.87	8.09	7.91	7.09
0.00	0.00	0.02	0.00	0.64
2.45	22.72	1.22	1.66	0.20
19.80	39.01	29.18	30.68	24.81
30.89	5.36	6.25	6.93	13.34
40.81	31.97	37.11	43.33	38.80
2.18	2.11	1.89	1.99	3.11
73.88	39.44	45.25	52.25	55.25
2.23	1.53	3.90	4.59	2.04
95.91	79.98	78.33	87.52	82.10
104.26%	125.03%	127.67%	114.26%	121.80%
$77.73	$65.32	$80.48	$78.76	$79.73
3.50	8.99	4.67	4.82	8.52
8.28	9.98	7.08	6.92	8.79
89.51	84.29	92.23	90.50	97.04
10.49	15.71	7.77	9.50	2.96
10.94%	19.64%	[illegible]	10.85%	3.61%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	42.74	42.78	41.46
FACTORY EXPENSES	22.43	21.54	21.17
TOTAL FACTORY COST OF PRODUCT	65.17	64.32	62.63
GROSS PROFIT	34.83	35.68	37.37
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	13.64	12.31	10.81
Selling expenses	17.08	15.15	10.04
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	30.72	27.46	20.85
INCOME BEFORE INTEREST EXPENSE	4.11	8.22	16.52
Interest expense	4.93	3.77	2.87
OPERATING INCOME (LOSS)	(0.82)	4.45	13.65
Other income (expense)	(0.01)	1.11	1.58
INCOME (LOSS) BEFORE INCOME TAXES	(0.83)	5.56	15.23

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
X	X	X	X	X
X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%
42.21	37.74	42.58	39.76	53.10
21.47	20.54	20.75	20.97	24.06
63.68	58.28	63.33	60.73	77.16
36.32	41.72	36.67	39.27	22.84
14.07	11.62	14.56	11.76	11.25
12.14	12.78	10.20	8.38	6.62
26.21	24.40	24.76	20.14	17.87
10.11	17.32	11.91	19.13	4.97
3.06	2.01	3.60	2.81	3.32
7.05	15.31	8.31	16.32	1.65
1.77	2.18	2.10	6.82	5.15
8.82	17.49	10.41	23.14	6.80

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL			
Salaries - executive	3.52%	2.23%	1.94%
Direct wages	29.98	29.52	29.83
General factory salaries and wages	2.46	3.48	2.40
Packing, shipping and delivery wages	0.39	1.30	1.51
Payroll taxes	2.66	2.67	2.63
Employee benefits	3.73	3.58	3.15
TOTAL FACTORY PAYROLL	42.74	42.78	41.46
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.62	0.34	0.18
Depreciation - other	7.52	6.38	6.55
Taxes - real estate	0.72	0.28	0.24
Taxes - other	0.00	0.35	0.27
Insurance	0.73	0.74	0.79
Building rent	1.77	2.02	2.36
Utilities - heat, light, etc.	2.88	2.01	1.73
Equipment rental	2.09	0.84	0.88
Total Fixed Expenses	16.33	12.96	13.00
Other Expenses			
Factory supplies and expense	2.80	3.52	2.68
Packing, shipping and delivery expense	1.25	1.87	2.40
Repairs and maintenance	2.55	2.22	2.21
Other factory expenses	(0.50)	0.97	0.88
Total Other Expenses	6.10	8.58	8.17
TOTAL FACTORY EXPENSES	22.43	21.54	21.17
ADMINISTRATIVE EXPENSES			
Salaries - executive	6.62	3.37	3.23
Salaries - office	1.76	2.83	2.39
Payroll taxes	0.86	0.38	0.30
Employee benefits	0.66	0.66	0.60
Bad debts	0.03	0.89	0.51
Office supplies and expenses	0.50	0.75	0.47
Professional fees	0.68	0.75	0.74
Taxes - business	0.00	0,12	0.07
Telephone	0.45	0.61	0.52
Other administrative expenses	2.08	1.95	1.98
TOTAL ADMINISTRATIVE EXPENSES	13.64	12.31	10.81
SELLING EXPENSES			
Salaries - executive	2.13	1.65	1.78
Salaries and commissions - salesmen	8.22	7.80	4.87
Salaries - sales office clerical	2.15	1.28	0.83
Payroll taxes	0.73	0.53	0.30
Employee benefits	1.09	0.67	0.42
Advertising	0.21	0.59	0.22
Travel and entertainment	0.82	1.33	0.77
Other selling expenses	1.73	1.30	0.85
TOTAL SELLING EXPENSES	17.08	15.15	10.04

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
2.96%	2.59%	3.00%	2.97%	2.30%
29.01	26.12	28.03	24.05	34.22
2.58	2.46	3.45	3.89	6.85
1.51	1.54	1.59	1.51	1.35
2.75	2.52	2.75	2.49	3.33
3.40	2.51	3.76	4.85	5.05
42.21	37.74	42.58	39.76	53.10
0.55	0.45	0.55	0.98	0.28
5.23	5.00	5.65	6.12	5.81
0.40	0.46	0.35	0.36	0.79
0.32	0.23	0.30	0.24	0.01
0.68	0.94	0.76	0.55	0.41
1.57	1.25	1.21	0.44	2.23
2.11	1.90	2.22	2.41	2.83
1.56	0.64	1.06	1.54	0.96
12.42	10.87	12.10	12.64	13.32
3.02	2.52	3.52	3.36	3.97
1.32	1.76	1.56	1.31	0.97
2.91	3.10	2.85	3.20	3.40
1.80	2.29	0.72	0.46	2.40
9.05	9.67	8.65	8.33	10.74
21.47	20.54	20.75	20.97	24.06
3.53	3.27	4.56	2.69	3.34
3.58	2.31	3.09	2.75	1.76
0.51	0.39	0.56	0.48	0.26
0.94	0.70	1.08	1.24	0.31
1.06	0.89	0.91	0.50	0.88
0.58	0.66	0.45	0.47	0.34
0.80	0.89	0.85	0.80	1.09
0.14	0.22	0.27	0.59	0.03
0.61	0.56	0.58	0.66	0.51
2.32	1.73	2.21	1.58	2.73
14.07	11.62	14.56	11.76	11.25
1.58	0.93	1.48	1.05	1.00
5.87	6.04	4.87	4.04	2.29
0.94	1.58	0.83	0.56	0.49
0.46	0.43	0.37	0.27	0.30
0.51	0.54	0.56	0.57	0.23
0.64	0.74	0.53	0.54	0.67
1.06	1.30	0.84	1.18	0.65
1.08	1.22	0.72	0.17	0.99
12.14	12.78	10.20	8.38	6.62

REPORT ON OPERATIONS - SALES = 100%

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	28.06	26.28	24.52
Other chargeable materials	5.50	4.80	5.34
Outside services	6.20	8.13	5.67
TOTAL MATERIALS	39.76	39.21	35.53
FACTORY PAYROLL	25.68	25.93	26.56
FACTORY EXPENSES	13.50	13.04	13.50
TOTAL FACTORY COST OF PRODUCT	78.94	78.18	75.59
GROSS PROFIT	21.06	21.82	24.41
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	8.24	7.51	7.07
Selling expenses	10.08	9.10	6.59
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	18.32	16.61	13.66
INCOME BEFORE INTEREST EXPENSE	2.74	5.21	10.75
Interest expense	2.81	2.26	1.80
OPERATING INCOME (LOSS)	(0.07)	2.95	8.95
Other income (expense)	(0.01)	0.65	0.92
INCOME (LOSS) BEFORE INCOME TAXES	(0.08)	3.60	9.87

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS			
Ink	1.83%	1.71%	0.97%
Film	0.80	1.26	1.35
Plates	0.91	0.97	1.42
Other chargeable materials	1.96	0.86	1.60
TOTAL OTHER CHARGEABLE MATERIALS	5.50	4.80	5.34
OUTSIDE SERVICES			
Composition	0.46	0.74	0.59
Offset preparation	0.13	1.26	1.06
Printing	1.01	1.30	0.43
Binding	0.35	2.48	1.83
Other outside services	4.25	2.35	1.76
TOTAL OUTSIDE SERVICES	6.20	8.13	5.67

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%	100.00%
25.73	24.84	29.32	28.25	39.85
5.70	5.54	5.37	5.25	6.35
9.02	7.33	7.50	10.58	4.68
40.45	37.71	42.19	44.08	50.88
25.23	23.47	24.72	22.27	25.87
12.80	12.97	12.05	11.80	11.87
78.48	74.15	78.96	78.15	88.62
21.52	25.85	21.04	21.85	11.38
8.34	7.25	8.43	6.60	5.67
7.17	7.84	5.94	4.88	3.23
15.51	15.09	14.37	11.48	8.90
6.01	10.76	6.67	10.37	2.48
1.80	1.20	2.10	1.66	1.70
4.21	9.56	4.57	8.71	0.78
1.06	1.35	1.22	3.98	-2.28
5.27	10.91	5.79	12.69	3.06

2.27%	1.44%	1.81%	1.86%	3.30%
1.10	0.94	0.93	1.10	0.39
1.29	1.52	1.12	1.19	0.87
1.04	1.64	1.51	1.10	1.79
5.70	5.54	5.37	5.25	6.35
0.75	2.27	0.62	0.08	0.30
1.99	2.45	1.04	1.10	0.78
0.89	1.11	1.67	2.98	1.17
3.39	0.21	2.93	2.47	0.79
2.00	1.29	1.24	3.95	1.64
9.02	7.33	7.50	10.58	4.68

SUPPORTING SCHEDULES - SALES = 100%

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL			
Salaries - executive	2.09%	1.38%	1.26%
Direct wages	18.19	17.85	19.01
General factory salaries and wages	1.38	2.12	1.59
Packing, shipping and delivery wages	0.21	0.80	0.99
Payroll taxes	1.62	1.62	1.71
Employee benefits	2.19	2.16	2.00
TOTAL FACTORY PAYROLL	25.68	25.93	26.56
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.33	0.21	0.11
Depreciation - other	4.41	3.83	4.12
Taxes - real estate	0.39	0.16	0.15
Taxes - other	0.00	0.21	0.18
Insurance	0.45	0.45	0.50
Building rent	1.17	1.25	1.51
Utilities - heat, light, etc.	1.66	1.21	1.10
Equipment rental	1.36	0.54	0.59
Total Fixed Expenses	9.77	7.86	8.26
Other Expenses			
Factory supplies and expense	1.70	2.14	1.74
Packing, shipping and delivery expense	0.80	1.11	1.49
Repairs and maintenance	1.46	1.35	1.41
Other factory expenses	(0.23)	0.58	0.60
Total Other Expenses	3.73	5.18	5.24
TOTAL FACTORY EXPENSES	13.50	13.04	13.50
ADMINISTRATIVE EXPENSES			
Salaries - executive	4.10	2.08	2.11
Salaries - office	1.04	1.73	1.51
Payroll taxes	0.52	0.23	0.19
Employee benefits	0.38	0.40	0.39
Bad debts	0.02	0.53	0.36
Office supplies and expenses	0.29	0.45	0.31
Professional fees	0.37	0.45	0.48
Taxes - business	0.00	0.07	0.04
Telephone	0.26	0.37	0.33
Other administrative expenses	1.26	1.20	1.35
TOTAL ADMINISTRATIVE EXPENSES	8.24	7.51	7.07
SELLING EXPENSES			
Salaries - executive	1.31	1.02	1.20
Salaries and commissions - salesmen	4.91	4.69	3.20
Salaries - sales office clerical	1.24	0.78	0.53
Payroll taxes	0.43	0.32	0.20
Employee benefits	0.61	0.41	0.28
Advertising	0.12	0.35	0.15
Travel and entertainment	0.50	0.78	0.50
Other selling expenses	0.96	0.75	0.53
TOTAL SELLING EXPENSES	10.08	9.10	6.59

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
1.76%	1.59%	1.75%	1.64%	1.06%
17.38	16.41	16.25	13.43	16.75
1.55	1.46	2.00	2.17	3.41
0.91	0.93	0.93	0.88	0.64
1.64	1.53	1.61	1.40	1.65
1.99	1.55	2.18	2.75	2.36
25.23	23.47	24.72	22.27	25.87
0.33	0.28	0.32	0.58	0.14
3.07	3.13	3.28	3.37	2.87
0.24	0.29	0.20	0.22	0.38
0.19	0.14	0.18	0.14	0.01
0.42	0.61	0.44	0.32	0.21
0.91	0.76	0.74	0.26	1.09
1.26	1.20	1.28	1.32	1.38
0.97	0.41	0.62	0.90	0.47
7.39	6.82	7.06	7.11	6.55
1.77	1.57	2.04	1.87	2.01
0.76	1.00	0.91	0.77	0.46
1.73	1.94	1.63	1.79	1.63
1.15	1.64	0.41	0.26	1.22
5.41	6.15	4.99	4.69	5.32
12.80	12.97	12.05	11.80	11.87
2.15	2.08	2.66	1.51	1.69
2.06	1.40	1.77	1.48	0.89
0.30	0.24	0.33	0.26	0.13
0.55	0.42	0.63	0.70	0.15
0.60	0.52	0.54	0.29	0.42
0.34	0.39	0.26	0.27	0.16
0.48	0.57	0.50	0.47	0.53
0.08	0.13	0.15	0.35	0.02
0.36	0.34	0.34	0.37	0.26
1.42	1.16	1.25	0.90	1.42
8.34	7.25	8.43	6.60	5.67
0.91	0.56	0.87	0.62	0.52
3.43	3.65	2.80	2.33	1.10
0.56	0.96	0.49	0.32	0.22
0.28	0.26	0.22	0.16	0.14
0.30	0.33	0.34	0.34	0.11
0.39	0.46	0.31	0.32	0.36
0.63	0.80	0.49	0.69	0.34
0.67	0.82	0.42	0.10	0.44
7.17	7.84	5.94	4.88	3.23

BALANCE SHEET

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
ASSETS			
CURRENT ASSETS			
Cash	1.97%	4.30%	6.83%
Receivables	35.48	31.90	30.48
Inventories	14.21	12.14	11.15
Other current assets	0.12	3.90	8.91
TOTAL CURRENT ASSETS	51.78	52.24	57.37
FIXED ASSETS			
Real estate	13.86	9.26	5.35
Less: Accumulated depreciation	5.23	2.47	1.86
	8.63	6.79	3.49
Machinery and equipment	85.71	67.80	64.27
Less: Accumulated depreciation	48.62	33.18	30.77
	37.09	34.62	33.50
Other fixed assets	2.38	5.71	5.98
Less: Accumulated depreciation	2.20	2.99	3.22
	0.18	2.72	2.76
NET FIXED ASSETS	45.90	44.13	39.75
OTHER ASSETS	2.32	3.63	2.88
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	4.55	10.86	6.38
Accounts payable	17.94	13.78	10.91
Other current liabilities	7.59	7.16	10.66
TOTAL CURRENT LIABILITIES	30.08	31.80	27.95
LONG-TERM LIABILITIES	50.46	34.97	31.32
TOTAL LIABILITIES	80.54	66.77	59.27
SHAREHOLDERS' AND PROPRIETORS' EQUITY	19.46	33.23	40.73
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.72	1.64	2.05
QUICK RATIO	1.25	1.26	1.65
TOTAL LIABILITIES TO EQUITY	4.14	2.01	1.46
LONG-TERM LIABILITIES TO EQUITY	2.59	1.05	0.77
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.57	0.49	0.48

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
4.10%	7.33%	4.69%	1.99%	2.31%
30.04	30.83	29.00	26.68	36.32
15.78	13.83	16.16	15.39	13.96
3.40	1.49	2.56	4.66	0.62
53.32	53.48	52.41	48.72	53.21
11.45	15.39	14.74	16.50	8.52
2.52	4.13	5.18	3.34	1.88
8.93	11.26	9.56	13.16	6.64
62.47	67.83	68.75	50.65	67.41
30.47	36.99	37.66	27.72	29.19
32.00	30.84	31.09	22.93	38.22
4.75	2.31	4.60	3.74	0.73
2.79	1.44	2.71	2.66	0.31
1.96	0.87	1.89	1.08	0.42
42.89	42.97	42.54	37.17	45.28
3.79	3.55	5.05	14.11	1.51
100.00	100.00	100.00	100.00	100.00
9.15	8.73	10.24	5.12	9.36
14.78	12.63	11.33	9.98	15.82
8.93	6.42	6.25	4.61	6.58
32.86	27.78	27.82	19.71	31.76
26.08	15.12	31.38	18.28	28.10
58.94	42.90	59.20	37.99	59.86
41.06	57.10	40.80	62.01	40.14
100.00	100.00	100.00	100.00	100.00
1.62	1.93	1.88	2.47	1.68
1.14	1.43	1.30	1.69	1.24
1.44	0.75	1.45	0.61	1.49
0.64	0.26	0.77	0.29	0.70
0.49	0.55	0.55	0.55	0.43

SIGNIFICANT FACTS

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Average assets per employee - All employees	$ 35,658	$ 49,220	$ 44,175
Average assets per factory employee (Excluding Executives)	58,307	65,383	54,225
Average net worth per employee - All employees	5,538	16,234	17,099
Average gross plant investment per factory employee (Excluding Executives)	62,340	53,833	39,694
Net worth percentage of fixed assets	48.42%	85.63%	134.08%
EMPLOYEES			
Percent factory - All employees	66.66%	78.65%	84.76%
Percent administrative - All employees	11.99	9.69	7.86
Percent sales - All employees	21.35	11.66	7.38
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 84,061	$ 88,621	$ 79,729
Sales per factory employee	126,092	113,139	94,291
Sales less material per factory employee	74,229	67,838	61,230
Sales per administrative employee	707,174	1,109,517	1,061,491
EXCLUDING EXECUTIVES			
Sales per employee - All employees	96,242	94,601	84,597
Sales per factory employee	137,206	117,754	97,989
Sales less material per factory employee	80,705	70,685	63,649
SALES PER SALESMAN	865,233	862,208	1,102,988
SALES TO CURRENT ASSETS	504%	371%	347%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	40.22%	37.58%	36.17%
Factory payroll percentage of gross plant investment	70.77	64.54	70.81
Payroll per employee - All employees	$ 33,255	$ 32,795	$ 28,902
Payroll per factory employee	31,834	28,732	25,004
Payroll per administrative employee	40,370	41,664	43,533
Payroll per sales employee	33,584	58,171	59,670
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 25,623	$ 25,985	$ 22,676
Payroll per factory employee	26,499	23,761	20,953
Payroll per administrative employee	13,108	20,143	20,521
Payroll per sales employee	27,590	48,699	48,208
EXECUTIVE PAYROLL			
Payroll per executive - All executives	46,643	70,424	76,094
Payroll per factory executive	33,025	40,642	36,637
Payroll per administrative executive	71,114	86,458	99,695
Payroll per sales executive	45,523	66,226	48,229
RECEIVABLES			
Collection period	52.1	64.8	62.4
PROFIT			
Gross profit percentage of sales	21.06%	21.82%	24.41%
Average gross profit per factory employee	$ 27,968	$ 25,773	$ 24,534
Income (loss) before taxes percentage of sales	(0.08)%	3.60%	9.87%
Average income (loss) before taxes per employee	$ (844)	$ 3,128	$ 7,922

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 55,348	$ 50,504	$ 52,989	$ 72,304	$ 51,028
74,543	66,845	69,398	92,847	59,376
22,666	27,709	23,557	47,285	20,959
57,932	58,741	55,996	61,940	45,707
112.77%	168.94%	132.39%	235.79%	90.56%
78.13%	79.04%	80.01%	80.96%	89.54%
12.15	10.08	11.25	10.69	6.44
9.72	10.88	8.74	8.35	4.02
$ 92,473	$ 88,458	$ 92,947	$ 97,052	$ 91,901
119,487	113,120	117,226	120,278	103,263
69,244	70,664	66,911	66,055	49,526
936,344	954,457	1,098,387	1,249,284	1,412,577
100,068	95,361	100,589	105,745	98,428
125,605	118,176	122,652	126,878	108,217
72,753	73,756	70,026	69,649	51,820
961,255	1,003,039	1,141,111	1,034,747	1,900,668
357%	365%	394%	319%	332%
35.76%	33.37%	34.83%	29.98%	30.82%
64.71	55.81	62.59	49.26	59.71
$ 32,053	$ 29,265	$ 31,415	$ 28,721	$ 28,156
28,449	26,089	27,748	26,528	26,718
40,162	36,772	42,718	40,835	38,582
57,652	52,113	49,111	35,711	49,239
$ 24,737	$ 23,456	$ 23,857	$ 21,527	$ 22,411
23,328	21,797	22,465	20,728	22,203
19,616	18,924	20,146	19,187	17,857
41,737	45,227	37,270	26,353	37,421
62,193	51,101	66,668	45,070	57,158
43,175	39,699	45,039	38,597	23,542
78,526	61,003	93,550	62,317	70,786
66,872	50,632	64,830	59,908	66,714
61.3	60.1	56.6	69.6	80.7
21.52%	25.85%	21.04%	21.85%	11.38%
$ 27,198	$ 30,858	$ 26,155	$ 27,116	$ 11,384
5.27%	10.91%	5.79%	12.69%	3.06%
$ 5,004	$ 9,693	$ 5,468	$ 12,141	$ 3,136

RETURN ON INVESTMENT - PER $100 OF SALES

	11% TO 21%**	21% TO 41%	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Current Assets:			
Cash	$ 0.72	$ 2.57	$ 3.31
Receivables	13.81	17.13	16.45
Inventories	5.34	6.71	6.09
Marketable securities	0.00	0.33	0.00
Other current assets	0.06	1.94	5.77
	19.93	28.68	31.62
Plant Investment:			
Land and building	6.92	5.75	2.69
Machinery and equipment	34.20	37.15	35.87
Other fixed assets	0.97	3.10	3.17
	42.09	46.00	41.73
Non-Current Assets	0.92	1.96	1.57
TOTAL INVESTMENT	62.94	76.64	74.92
INVESTMENT TURNOVER PER $100 OF SALES	158.88%	130.48%	133.48%
EARNINGS			
Cost of Product	$78.94	$78.18	$75.59
Selling Expenses	10.08	9.10	6.59
Administrative Expenses	8.24	7.51	7.07
	97.26	94.79	89.25
Income Before Interest, Other Income (Expense), and Taxes	2.74	5.21	10.75
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	4.35%	6.80%	14.35%

** Sample insufficient for Profit Leaders.

41% TO 61%		61% TO 81%		81% TO 99%**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 3.54	$ 5.83	$ 2.34	$ 1.61	$ 1.24
16.21	16.02	14.96	18.35	21.43
8.32	7.25	8.73	11.35	7.97
1.50	0.53	0.52	1.43	0.00
0.60	0.67	1.02	1.92	0.41
30.17	30.30	27.57	34.66	31.05
8.37	10.59	8.46	12.92	5.67
37.40	39.25	35.95	37.67	38.76
2.56	1.42	2.33	2.39	0.32
48.33	51.26	46.74	52.98	44.75
2.17	1.73	3.51	10.73	1.03
80.67	83.29	77.82	98.37	76.83
123.96%	120.06%	128.50%	101.66%	130.16%
$78.48	$74.15	$78.96	$78.15	$88.62
7.17	7.84	5.94	4.88	3.23
8.34	7.25	8.43	6.60	5.67
93.99	89.24	93.33	89.63	97.52
6.01	10.76	6.67	10.37	2.48
7.45%	12.92%	8.57%	10.54%	3.23%

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	96	$ 8,316,000	$13,619,000	$ 649,000
TOTAL - PROFIT LEADERS*	23	7,222,000	11,464,000	1,202,000
BY SIZE OF FIRM				
ALL FIRMS				
$0-$1,500,000	6	483,000	1,216,000	53,000
$1,500,000-$5,000,000	16	2,076,000	3,778,000	217,000
$5,000,000-$10,000,000	30	4,151,000	7,547,000	297,000
$10,000,000-$20,000,000	30	9,242,000	15,383,000	498,000
Over $20,000,000	14	25,742,000	39,415,000	2,479,000
PROFIT LEADERS				
$1,500,000-$5,000,000	5	2,087,000	3,563,000	439,000
$5,000,000-$10,000,000	10	4,378,000	7,465,000	771,000
$10,000,000-$20,000,000	4	9,699,000	14,121,000	1,328,000
Over $20,000,000	4	18,274,000	28,685,000	3,107,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Commercial and Advertising	71	8,949,000	14,811,000	627,000
Magazine and Periodical	6	8,990,000	13,107,000	982,000
Newspaper	2	1,883,000	2,668,000	263,000
Financial	2	6,020,000	11,572,000	1,754,000
Book	[illegible]	6,577,000	11,244,000	808,000
No Predominant Product	[illegible]	4,431,000	6,991,000	(44,000)
PROFIT LEADERS				
Commercial and Advertising	10	7,184,000	12,463,000	1,180,000
Magazine and Periodical	3	10,636,000	12,847,000	1,610,000
Financial	2	6,020,000	11,572,000	1,754,000
Book	6	6,753,000	11,101,000	1,054,000
BY PERCENTAGE OF WEB SALES				
ALL FIRMS				
11% To 21%	2	1,983,000	4,237,000	(121,000)
21% To 41%	38	9,649,000	15,264,000	679,000
41% To 61%	30	6,404,000	10,184,000	517,000
61% To 81%	22	8,222,000	14,039,000	753,000
81% To 99%	3	15,068,000	28,278,000	1,308,000
PROFIT LEADERS				
21% TO 41%	9	5,970,000	11,002,000	1,035,000
41% To 61%	8	5,550,000	9,228,000	1,070,000
61% To 81%	6	11,329,000	15,140,000	1,628,000

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages.

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

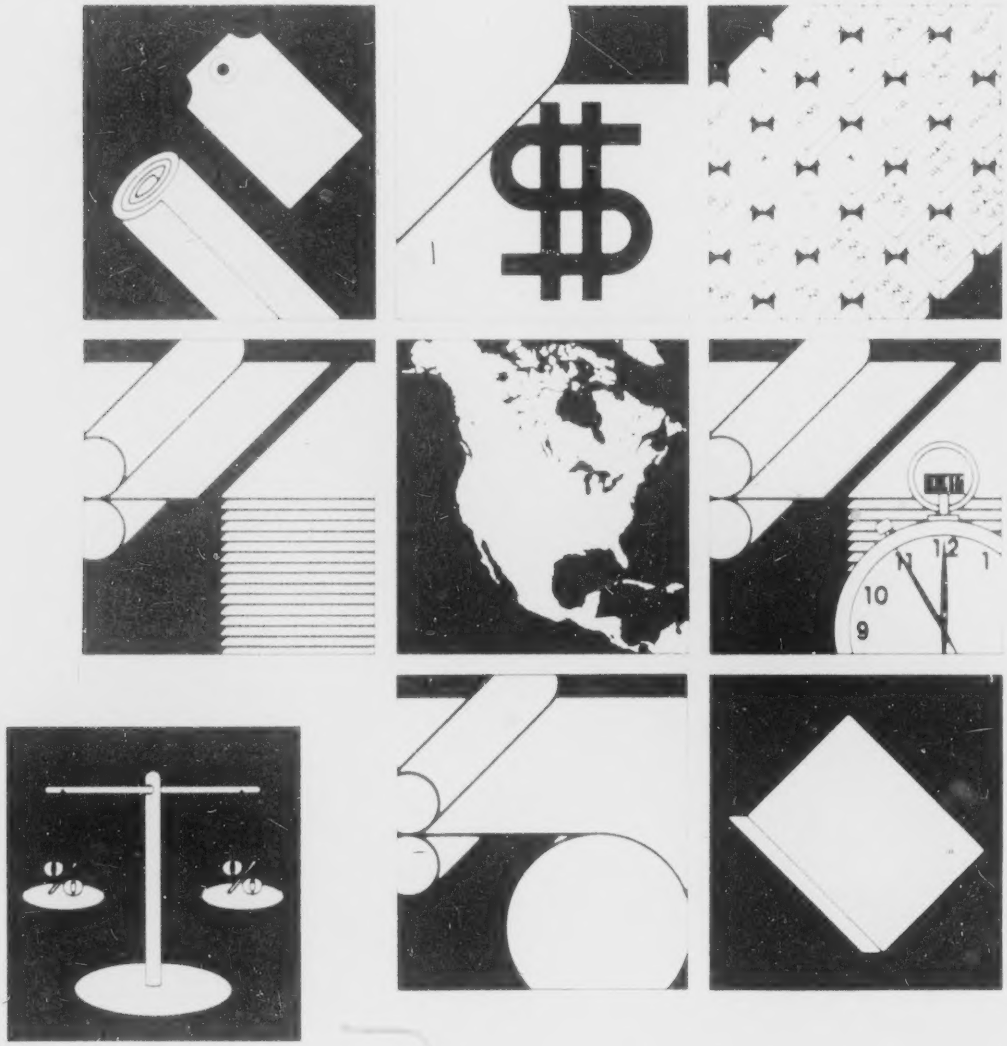
			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

A8740-1.9U

10/87

PIA
1887–1987

1987 Financial Ratio Study



Volume IX

Book Manufacturers

1987
FINANCIAL
RATIO STUDY

Volume IX: Book Manufacturers

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume,* and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset,* respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H . R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 34 Book Manufacturers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales from $500,000 to $1,500,000, sales from $1,500,000 to $5,000,000, etc.; by process specialty - for example, sheet-fed offset, web-fed offset or combination offset; and by product specialty - for example, printing and binding or printing only. Readers can compare their firm's operations with other firms having the same sales volume, process specialty or product specialty in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H R Margolis Company

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.......... 2

VALUE ADDED -- WHAT IT MEANS TO YOU.......... 4- 5

CHAPTER 1 - BY SIZE OF FIRM. 6-19
  Report on Operations - Value Added = 100%.......... 6- 7
  Supporting Schedules - Value Added = 100%.......... 8- 9
  Report on Operations - Sales = 100%.......... 10-11
  Supporting Schedules - Sales = 100%.......... 10-13
  Balance Sheet.......... 14-15
  Significant Facts.......... 16-17
  Return on Investment - Per $100 of Sales.......... 18-19

CHAPTER 2 - BY PROCESS SPECIALTY.......... 20-33
  Report on Operations - Value Added = 100%.......... 20-21
  Supporting Schedules - Value Added = 100%.......... 22-23
  Report on Operations - Sales = 100%.......... 24-25
  Supporting Schedules - Sales = 100%.......... 24-27
  Balance Sheet.......... 28-29
  Significant Facts.......... 30-31
  Return on Investment - Per $100 of Sales.......... 32-33

CHAPTER 3 - BY PRODUCT SPECIALTY.......... 34-40
  Report on Operations - Value Added = 100%.......... 34
  Supporting Schedules - Value Added = 100%.......... 35
  Report on Operations - Sales = 100%.......... 36
  Supporting Schedules - Sales = 100%.......... 36-37
  Balance Sheet.......... 38
  Significant Facts.......... 39
  Return on Investment - Per $100 of Sales.......... 40

ABSOLUTE DATA.......... 41-42

VALUE ADDED -- WHAT IT MEANS TO YOU

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	46.59	42.50	57.42
FACTORY EXPENSES	21.09	20.59	17.20
TOTAL FACTORY COST OF PRODUCT	67.68	63.09	74.62
GROSS PROFIT	32.32	36.91	25.38
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	13.72	11.16	18.08
Selling expenses	10.48	9.32	5.95
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	24.20	20.48	24.03
INCOME BEFORE INTEREST EXPENSE	8.12	16.43	1.35
Interest expense	3.42	2.36	3.17
OPERATING INCOME (LOSS)	4.70	14.07	(1.82)
Other income (expense)	1.81	2.79	(1.27)
INCOME (LOSS) BEFORE INCOME TAXES	6.51	16.86	(3.09)

---

* See page 10 for the definition of "Profit Leaders".
** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
X	X	X	X	X
X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%
47.90	45.28	41.79	45.02	42.93
21.89	23.26	22.83	19.46	18.63
69.79	68.54	64.62	64.48	61.56
30.21	31.46	35.38	35.52	38.44
14.63	13.21	11.22	12.82	11.67
9.74	9.52	8.71	12.43	10.40
24.37	22.73	19.93	25.25	22.07
5.84	8.73	15.45	10.27	16.37
4.91	3.27	3.51	2.54	1.47
0.93	5.46	11.94	7.73	14.90
1.82	2.34	5.23	1.86	2.11
2.75	7.80	17.17	9.59	17.01

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.86%	2.67%	4.20%
Direct wages	31.00	26.84	41.51
General factory salaries and wages	4.56	4.92	2.07
Packing, shipping and delivery wages	0.95	1.36	0.00
Payroll taxes	3.26	2.52	4.79
Employee benefits	3.96	4.19	4.85
TOTAL FACTORY PAYROLL	46.59	42.50	57.42
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.51	0.49	0.00
Depreciation - other	4.95	5.81	4.50
Taxes - real estate	0.35	0.28	0.57
Taxes - other	0.34	0.41	0.18
Insurance	0.75	0.67	1.41
Building rent	1.36	0.74	2.74
Utilities - heat, light, etc.	2.16	1.87	2.66
Equipment rental	0.30	0.20	0.00
Total Fixed Expenses	10.72	10.47	12.06
Other Expenses			
Factory supplies and expense	4.33	4.52	1.26
Packing, shipping and delivery expense	1.65	2.21	0.87
Repairs and maintenance	2.94	2.48	2.24
Other factory expenses	1.45	0.91	0.77
Total Other Expenses	10.37	10.12	5.14
TOTAL FACTORY EXPENSES	21.09	20.59	17.20
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.92	2.54	6.41
Salaries - office	3.66	2.59	5.09
Payroll taxes	0.48	0.36	0.78
Employee benefits	0.94	0.99	0.51
Bad debts	0.65	0.54	(0.06)
Office supplies and expenses	0.67	0.43	0.63
Professional fees	1.00	0.64	1.13
Taxes - business	0.41	0.46	0.28
Telephone	0.60	0.50	1.10
Other administrative expenses	2.39	2.11	2.21
TOTAL ADMINISTRATIVE EXPENSES	13.72	11.16	18.08
SELLING EXPENSES			
Salaries - executive	1.29	0.99	0.00
Salaries and commissions - salesmen	4.71	3.66	2.91
Salaries - sales office clerical	1.13	1.49	0.00
Payroll taxes	0.37	0.24	0.40
Employee benefits	0.38	0.46	0.31
Advertising	0.32	0.18	0.25
Travel and entertainment	1.00	1.14	1.36
Other selling expenses	1.28	1.16	0.72
TOTAL SELLING EXPENSES	10.48	9.32	5.95

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.77%	2.52%	1.62%	3.67%	3.64%
34.82	32.34	32.24	25.71	22.72
3.04	3.47	1.66	6.83	7.36
0.53	0.90	1.50	1.43	1.51
3.53	2.83	2.12	3.16	2.61
4.21	3.22	2.65	4.22	5.09
47.90	45.28	41.79	45.02	42.93
0.28	0.31	0.51	0.91	0.55
5.15	6.64	9.08	3.57	3.93
0.46	0.26	0.21	0.32	0.29
0.21	0.42	0.00	0.40	0.68
0.81	0.82	0.50	0.54	0.58
1.55	1.78	1.20	0.68	0.25
2.13	2.10	1.43	2.15	2.12
0.23	0.45	0.00	0.29	0.34
10.82	12.78	12.93	8.86	8.74
4.44	3.35	2.98	5.45	5.53
2.29	1.71	2.41	1.29	1.26
2.83	3.49	4.08	2.71	1.81
1.51	1.93	0.43	1.15	1.29
11.07	10.48	9.90	10.60	9.89
21.89	23.26	22.83	19.46	18.63
3.49	2.85	2.56	2.07	2.49
4.31	3.30	2.63	3.30	2.54
0.63	0.37	0.37	0.40	0.35
0.62	1.29	0.55	0.95	1.30
0.53	1.04	0.72	0.54	0.52
0.87	0.67	0.70	0.55	0.27
1.23	0.95	0.91	0.85	0.57
0.25	0.30	0.29	0.62	0.62
0.71	0.66	0.80	0.39	0.34
1.99	1.78	1.70	3.15	2.67
14.63	13.21	11.23	12.82	11.67
1.23	1.40	0.90	1.44	1.20
4.81	4.75	3.88	4.86	3.59
0.60	0.77	1.49	1.96	1.74
0.32	0.29	0.06	0.46	0.35
0.28	0.25	0.11	0.57	0.69
0.42	0.31	0.09	0.28	0.19
0.95	1.08	1.63	0.91	0.98
1.13	0.67	0.55	1.95	1.66
9.74	9.52	8.71	12.43	10.40

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	24.40	26.07	16.98
Other chargeable materials	6.74	6.69	7.34
Outside services	7.67	6.34	10.17
TOTAL MATERIALS	38.81	39.10	34.49
FACTORY PAYROLL	28.80	26.02	36.49
FACTORY EXPENSES	12.79	12.42	12.06
TOTAL FACTORY COST OF PRODUCT	80.40	77.54	83.04
GROSS PROFIT	19.60	22.46	16.96
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	8.28	6.78	11.70
Selling expenses	6.48	5.71	3.50
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	14.76	12.49	15.20
INCOME BEFORE INTEREST EXPENSE	4.84	9.97	1.76
Interest expense	2.02	1.39	2.19
OPERATING INCOME (LOSS)	2.82	8.58	(0.43)
Other income (expense)	1.06	1.66	(0.86)
INCOME (LOSS) BEFORE INCOME TAXES	3.88	10.24	(1.29)

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
OTHER CHARGEABLE MATERIALS			
Ink	1.11%	1.25%	0.70%
Film	1.33	1.22	1.05
Plates	1.66	1.69	2.24
Other chargeable materials	2.64	2.53	3.35
TOTAL OTHER CHARGEABLE MATERIALS	6.74	6.69	7.34
OUTSIDE SERVICES			
Composition	0.99	2.56	0.07
Offset preparation	0.64	0.22	0.00
Printing	0.54	0.44	0.00
Binding	4.36	1.22	9.46
Other outside services	1.14	1.90	0.64
TOTAL OUTSIDE SERVICES	7.67	6.34	10.17

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%
21.99	27.28	30.62	25.00	22.47
7.49	6.06	6.34	6.65	6.87
10.06	7.64	3.92	5.65	8.59
39.54	40.98	40.88	37.30	37.93
29.66	27.16	24.94	28.28	26.75
12.88	13.69	13.38	12.14	11.48
82.08	81.83	79.20	77.72	76.16
17.92	18.17	20.80	22.28	23.84
8.76	7.61	6.62	7.94	7.20
5.98	5.57	5.06	7.99	6.52
14.74	13.18	11.68	15.93	13.72
3.18	4.99	9.12	6.35	10.12
2.89	1.84	2.03	1.53	0.88
0.29	3.15	7.09	4.82	9.24
1.06	1.35	3.04	1.13	1.28
1.35	4.50	10.13	5.95	10.52

1.36%	1.22%	1.07%	0.98%	1.38%
1.22	0.93	0.55	1.65	1.28
1.88	1.72	1.71	1.41	1.59
3.03	2.19	3.01	2.61	2.62
7.49	6.06	6.34	6.65	6.87
1.21	0.22	0.00	1.59	3.50
1.82	0.42	0.00	0.34	0.30
0.95	0.54	0.00	0.41	0.60
5.53	5.27	0.00	1.87	1.67
0.55	1.19	3.92	1.44	2.52
10.06	7.64	3.92	5.65	8.59

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	1.76%	1.67%	2.53%
Direct wages	19.05	16.28	27.13
General factory salaries and wages	2.95	3.07	1.22
Packing, shipping and delivery wages	0.57	0.81	0.00
Payroll taxes	2.05	1.57	3.08
Employee benefits	2.42	2.62	2.53
TOTAL FACTORY PAYROLL	28.80	26.02	36.49
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.32	0.30	0.00
Depreciation - other	2.92	3.45	3.29
Taxes - real estate	0.23	0.17	0.47
Taxes - other	0.21	0.25	0.15
Insurance	0.46	0.41	0.72
Building rent	0.84	0.42	2.24
Utilities - heat, light, etc.	1.33	1.14	1.62
Equipment rental	0.20	0.13	0.00
Total Fixed Expenses	6.51	6.27	8.49
Other Expenses			
Factory supplies and expense	2.66	2.81	0.91
Packing, shipping and delivery expense	0.98	1.30	0.57
Repairs and maintenance	1.78	1.50	1.71
Other factory expenses	0.86	0.54	0.38
Total Other Expenses	6.28	6.15	3.57
TOTAL FACTORY EXPENSES	12.79	12.42	12.06
ADMINISTRATIVE EXPENSES			
Salaries - executive	1.79	1.56	3.83
Salaries - office	2.20	1.57	3.69
Payroll taxes	0.29	0.22	0.47
Employee benefits	0.56	0.61	0.26
Bad debts	0.36	0.33	(0.11)
Office supplies and expenses	0.41	0.26	0.39
Professional fees	0.63	0.38	0.77
Taxes - business	0.24	0.27	0.14
Telephone	0.36	0.30	0.63
Other administrative expenses	1.44	1.28	1.63
TOTAL ADMINISTRATIVE EXPENSES	8.28	6.78	11.70
SELLING EXPENSES			
Salaries - executive	0.78	0.60	0.00
Salaries and commissions - salesmen	2.95	2.22	1.76
Salaries - sales office clerical	0.69	0.93	0.00
Payroll taxes	0.23	0.15	0.22
Employee benefits	0.24	0.29	0.15
Advertising	0.19	0.11	0.20
Travel and entertainment	0.60	0.69	0.82
Other selling expenses	0.80	0.72	0.35
TOTAL SELLING EXPENSES	6.48	5.71	3.50

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.19%	1.37%	0.95%	2.33%	2.30%
21.25	19.41	19.23	16.03	14.03
2.06	2.25	0.99	4.35	4.63
0.33	0.52	0.88	0.86	0.91
2.21	1.73	1.28	2.02	1.66
2.62	1.88	1.61	2.69	3.22
29.66	27.16	24.94	28.28	26.75
0.16	0.19	0.30	0.59	0.34
2.90	3.81	5.28	2.19	2.40
0.28	0.16	0.12	0.20	0.19
0.13	0.25	0.00	0.25	0.41
0.51	0.52	0.30	0.34	0.36
0.99	1.05	0.69	0.36	0.12
1.32	1.27	0.85	1.34	1.32
0.14	0.31	0.00	0.18	0.21
6.43	7.56	7.54	5.45	5.35
2.57	1.97	1.79	3.51	3.48
1.34	0.98	1.38	0.79	0.75
1.63	2.05	2.42	1.69	1.12
0.91	1.13	0.25	0.70	0.78
6.45	6.13	5.84	6.69	6.13
12.88	13.69	13.38	12.14	11.48
2.15	1.70	1.53	1.29	1.56
2.48	1.84	1.54	2.08	1.57
0.38	0.21	0.22	0.25	0.22
0.40	0.73	0.34	0.58	0.80
0.27	0.55	0.41	0.34	0.32
0.53	0.39	0.43	0.34	0.17
0.80	0.58	0.53	0.52	0.35
0.15	0.18	0.16	0.38	0.37
0.43	0.39	0.47	0.25	0.21
1.17	1.04	0.99	1.91	1.63
8.76	7.61	6.62	7.94	7.20
0.76	0.82	0.52	0.88	0.73
3.01	2.81	2.22	3.21	2.28
0.34	0.46	0.90	1.22	1.11
0.21	0.17	0.03	0.30	0.22
0.18	0.14	0.06	0.36	0.43
0.24	0.17	0.05	0.17	0.11
0.56	0.63	0.95	0.57	0.61
0.68	0.37	0.33	1.28	1.03
5.98	5.57	5.06	7.99	6.52

BALANCE SHEET

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	2.58%	4.88%	(0.19)%
Receivables	33.63	31.66	18.71
Inventories	16.70	13.36	19.78
Other current assets	2.89	1.80	2.72
TOTAL CURRENT ASSETS	55.80	51.70	41.02
FIXED ASSETS			
Real estate	15.18	13.39	17.81
Less: Accumulated depreciation	4.35	3.85	1.33
	10.83	9.54	16.48
Machinery and equipment	63.56	60.87	78.78
Less: Accumulated depreciation	36.19	28.98	42.39
	27.37	31.89	36.39
Other fixed assets	5.74	3.42	8.95
Less: Accumulated depreciation	3.25	1.71	2.94
	2.49	1.71	6.01
NET FIXED ASSETS	40.69	43.14	58.88
OTHER ASSETS	3.51	5.16	0.10
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	13.70	4.48	1.22
Accounts payable	15.35	12.13	6.91
Other current liabilities	12.53	13.59	5.65
TOTAL CURRENT LIABILITIES	41.58	30.20	13.78
LONG-TERM LIABILITIES	25.70	27.16	16.47
TOTAL LIABILITIES	67.28	57.36	30.25
SHAREHOLDERS' AND PROPRIETORS' EQUITY	32.72	42.64	69.75
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.34	1.71	2.98
QUICK RATIO	0.94	1.27	1.54
TOTAL LIABILITIES TO EQUITY	2.06	1.35	0.43
LONG-TERM LIABILITIES TO EQUITY	0.79	0.64	0.24
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.57	0.48	0.54

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.74%	3.48%	6.36%	2.89%	4.73%
35.85	37.17	33.64	31.68	33.59
16.48	16.89	14.29	16.23	12.63
1.87	3.64	1.93	3.04	1.14
55.94	61.18	56.22	53.84	52.09
13.91	10.93	10.84	18.92	15.82
3.29	4.77	3.89	5.21	4.45
10.62	6.16	6.95	13.71	11.37
80.61	65.39	74.47	48.01	51.06
51.79	37.79	40.54	23.21	22.58
28.82	27.60	33.93	24.80	28.48
7.15	6.06	4.31	4.02	2.50
4.42	3.72	2.84	2.13	1.01
2.73	2.34	1.47	1.89	1.49
42.17	36.10	42.35	40.40	41.34
1.89	2.72	1.43	5.76	6.57
100.00	100.00	100.00	100.00	100.00
27.29	14.00	8.30	5.98	0.94
22.59	17.18	14.87	10.23	11.00
11.04	7.93	11.37	18.15	15.81
60.92	39.11	34.54	34.36	27.75
31.78	18.77	24.31	28.26	25.96
92.70	57.88	58.85	62.62	53.71
7.30	42.12	41.15	37.38	46.29
100.00	100.00	100.00	100.00	100.00

0.92	1.56	1.63	1.57	1.88
0.65	1.13	1.21	1.09	1.42
12.70	1.37	1.43	1.68	1.16
4.35	0.45	0.59	0.76	0.56
0.64	0.58	0.54	0.48	0.44

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 36,670	$ 45,992	$ 27,431
Average assets per factory employee (Excluding Executives)	47,692	57,339	36,221
Average net worth per employee - All employees	12,431	18,857	17,691
Average gross plant investment per factory employee (Excluding Executives)	38,625	43,941	39,536
Net worth percentage of fixed assets	89.33%	118.72%	118.05%
EMPLOYEES			
Percent factory - All employees	81.79%	84.56%	80.73%
Percent administrative - All employees	10.09	8.13	15.39
Percent sales - All employees	8.12	7.31	3.88
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 69,044	$ 77,618	$ 50,636
Sales per factory employee	85,586	91,760	63,360
Sales less material per factory employee	50,222	55,884	36,830
Sales per administrative employee	792,912	1,100,008	325,453
EXCLUDING EXECUTIVES			
Sales per employee - All employees	74,664	83,391	58,204
Sales per factory employee	90,287	96,683	67,190
Sales less material per factory employee	52,976	58,970	38,891
SALES PER SALESMAN	1,151,684	1,527,506	299,502
SALES TO CURRENT ASSETS	367%	353%	458%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	38.54%	34.17%	46.87%
Factory payroll percentage of gross plant investment	77.02	64.16	60.52
Payroll per employee - All employees	$ 25,098	$ 26,375	$ 22,418
Payroll per factory employee	22,807	23,665	21,736
Payroll per administrative employee	35,190	43,402	24,759
Payroll per sales employee	40,407	46,739	27,266
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 19,767	$ 20,402	$ 17,308
Payroll per factory employee	18,618	19,126	17,071
Payroll per administrative employee	19,137	19,313	16,693
Payroll per sales employee	33,984	39,545	22,249
EXECUTIVE PAYROLL			
Payroll per executive - All executives	44,976	50,940	32,485
Payroll per factory executive	28,888	27,957	32,184
Payroll per administrative executive	62,357	73,564	34,153
Payroll per sales executive	45,285	52,670	0
RECEIVABLES			
Collection period	65.2	71.0	40.9
PROFIT			
Gross profit percentage of sales	19.60%	22.46%	16.96%
Average gross profit per factory employee	$ 17,721	$ 22,103	$ 9,675
Income (loss) before taxes percentage of sales	3.88%	10.24%	(1.29)%
Average income (loss) before taxes per employee	$ 2,976	$ 8,071	$ (1,193)

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 32,126	$ 37,863	$ 41,345	$ 40,319	$ 47,856
41,234	50,466	51,790	51,794	60,772
3,717	16,064	16,137	14,861	21,312
38,764	41,954	46,893	35,828	41,646
17.02%	141.67%	144.75%	94.73%	118.04%
80.62%	81.30%	83.52%	83.13%	83.96%
11.61	10.30	9.10	8.06	7.91
7.77	8.40	7.38	8.81	8.13
$ 65,603	$ 72,579	$ 64,864	$ 71,540	$ 81,725
82,009	92,246	77,948	86,358	97,304
47,100	51,510	45,960	53,454	60,307
619,751	771,355	716,228	1,001,293	1,242,064
70,234	78,234	68,436	77,517	89,222
84,124	97,815	80,183	92,317	104,392
48,462	54,305	47,251	57,247	64,805
551,036	889,831	813,139	1,890,535	2,017,747
403%	347%	315%	343%	345%
39.57%	36.04%	32.31%	38.46%	35.66%
68.16	90.60	55.11	75.25	70.90
$ 23,923	$ 24,888	$ 20,826	$ 26,485	$ 28,859
22,110	22,919	19,039	23,368	25,784
31,112	33,865	26,399	40,637	50,193
39,846	35,360	31,926	46,700	47,060
$ 19,369	$ 19,790	$ 17,422	$ 20,403	$ 21,480
18,386	19,128	16,426	18,624	20,174
19,712	17,176	14,067	20,624	19,452
35,487	30,879	31,151	37,137	36,675
33,987	53,922	55,698	47,625	45,294
19,492	33,749	26,161	31,146	33,514
40,239	80,185	74,151	68,295	73,773
13,058	41,817	21,146	77,230	77,210
62.0	69.9	81.7	67.7	72.9
17.92%	18.17%	20.80%	22.28%	23.84%
$ 14,750	$ 17,552	$ 17,148	$ 21,147	$ 25,075
1.35%	4.50%	10.13%	5.95%	10.52%
$ 1,308	$ 2,966	$ 6,602	$ 4,779	$ 8,803

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 1.32	$ 2.62	$(0.81)
Receivables	16.96	18.30	10.88
Inventories	8.67	7.70	11.10
Marketable securities	0.67	0.00	0.00
Other current assets	1.18	1.11	1.45
	28.80	29.73	22.62
Plant Investment:			
Land and building	8.87	7.75	8.83
Machinery and equipment	33.50	36.97	45.66
Other fixed assets	2.80	2.02	5.57
	45.17	46.74	60.06
Non-Current Assets	2.01	3.45	0.05
TOTAL INVESTMENT	75.98	79.92	82.73
INVESTMENT TURNOVER PER $100 OF SALES	131.61%	125.13%	120.88%
EARNINGS			
Cost of Product	$80.40	$77.54	$83.04
Selling Expenses	6.48	5.71	3.50
Administrative Expenses	8.28	6.78	11.70
	95.16	90.03	98.24
Income Before Interest, Other Income (Expense), and Taxes	4.84	9.97	1.76
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.37%	12.48%	2.13%

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$5,000,000**	SALES FROM $5,000,000-$10,000,000		SALES OVER $10,000,000	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 0.81	$ 1.72	$ 2.78	$ 1.68	$ 2.85
16.47	18.19	21.11	17.31	18.69
8.00	8.31	8.79	9.03	7.12
0.00	2.27	0.00	0.02	0.00
0.98	0.56	1.32	1.75	0.71
26.26	31.05	34.00	29.79	29.37
9.12	6.30	6.64	10.66	9.02
37.37	36.34	48.28	26.78	30.45
2.98	2.95	2.87	2.13	1.38
49.47	45.59	57.79	39.57	40.85
0.87	1.22	0.82	3.71	4.64
76.60	77.86	92.61	73.07	74.86
130.55%	128.44%	107.98%	136.86%	133.58%
$82.08	$81.83	$79.20	$77.72	$76.16
5.98	5.57	5.06	7.99	6.52
8.76	7.61	6.62	7.94	7.20
96.82	95.01	90.88	93.65	89.88
3.18	4.99	9.12	6.35	10.12
4.15%	6.41%	9.85%	8.69%	13.52%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%
FACTORY PAYROLL	47.16	43.70
FACTORY EXPENSES	20.32	17.83
TOTAL FACTORY COST OF PRODUCT	67.48	61.53
GROSS PROFIT	32.52	38.47
ADMINISTRATIVE AND SELLING EXPENSES		
Administrative expenses	13.75	10.43
Selling expenses	12.10	11.99
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	25.85	22.42
INCOME BEFORE INTEREST EXPENSE	6.67	16.05
Interest expense	3.14	0.63
OPERATING INCOME (LOSS)	3.53	15.42
Other income •	1.37	1.34
INCOME BEFORE INCOME TAXES	4.90	16.76

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
X	X	X
X	X	X
100.00%	100.00%	100.00%
51.96	42.20	42.82
23.14	22.32	21.67
75.10	64.52	64.49
24.90	35.48	35.51
14.84	13.19	11.53
7.11	8.51	8.07
21.95	21.70	19.60
2.95	13.78	15.91
3.54	3.71	3.26
(0.59)	10.07	12.65
2.20	2.76	3.54
1.61	12.83	16.19

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL		
Salaries - executive	3.34%	4.28%
Direct wages	30.74	22.00
General factory salaries and wages	4.91	8.17
Packing, shipping and delivery wages	0.74	1.01
Payroll taxes	3.43	3.07
Employee benefits	4.00	5.17
TOTAL FACTORY PAYROLL	47.16	43.70
FACTORY EXPENSES		
Fixed Expenses		
Depreciation - real estate	0.59	0.61
Depreciation - other	4.08	3.45
Taxes - real estate	0.38	0.42
Taxes - other	0.29	0.63
Insurance	0.89	0.58
Building rent	1.16	(0.32)
Utilities - heat, light, etc.	2.19	2.26
Equipment rental	0.39	0.21
Total Fixed Expenses	9.97	7.84
Other Expenses		
Factory supplies and expense	4.93	6.27
Packing, shipping and delivery expense	1.17	0.97
Repairs and maintenance	2.80	1.56
Other factory expenses	1.45	1.19
Total Other Expenses	10.35	9.99
TOTAL FACTORY EXPENSES	20.32	17.83
ADMINISTRATIVE EXPENSES		
Salaries - executive	3.23	2.98
Salaries - office	3.66	2.32
Payroll taxes	0.49	0.40
Employee benefits	0.98	0.79
Bad debts	0.64	0.58
Office supplies and expenses	0.77	0.27
Professional fees	0.92	0.28
Taxes - business	0.34	0.38
Telephone	0.64	0.39
Other administrative expenses	2.08	2.04
TOTAL ADMINISTRATIVE EXPENSES	13.75	10.43
SELLING EXPENSES		
Salaries - executive	1.43	0.96
Salaries and commissions - salesmen	5.47	4.47
Salaries - sales office clerical	1.11	2.39
Payroll taxes	0.47	0.39
Employee benefits	0.45	0.72
Advertising	0.43	0.17
Travel and entertainment	0.95	0.80
Other selling expenses	1.79	2.09
TOTAL SELLING EXPENSES	12.10	11.99

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
1.02%	2.52%	2.11%
34.47	29.05	29.19
6.20	3.10	3.22
1.65	1.05	1.40
3.86	2.69	2.61
4.76	3.79	4.29
51.96	42.20	42.82
0.26	0.39	0.45
5.46	7.12	7.02
0.15	0.20	0.25
0.95	0.23	0.13
0.26	0.70	0.77
2.75	1.32	1.05
2.80	1.85	1.70
0.27	0.16	0.22
12.90	11.97	11.59
1.77	3.98	3.96
2.52	2.40	2.72
3.27	3.16	2.99
2.68	0.81	0.41
10.24	10.35	10.08
23.14	22.32	21.67
3.28	2.03	2.33
3.09	4.10	2.71
0.50	0.47	0.37
0.67	0.99	1.21
0.21	0.95	0.57
0.40	0.60	0.53
1.78	0.75	0.76
0.40	0.48	0.46
0.41	0.63	0.60
4.10	2.19	1.99
14.84	13.19	11.53
1.74	0.92	0.90
2.67	3.98	3.37
0.65	1.13	1.11
0.22	0.24	0.18
0.22	0.28	0.36
0.31	0.12	0.15
0.59	1.32	1.38
0.71	0.52	0.62
7.11	8.51	8.07

REPORT ON OPERATIONS - SALES = 100%

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%
FACTORY COST OF PRODUCT		
MATERIALS		
Paper	21.46	18.86
Other chargeable materials	7.10	9.47
Outside services	7.33	6.61
TOTAL MATERIALS	35.89	34.94
FACTORY PAYROLL	30.32	28.43
FACTORY EXPENSES	12.97	11.57
TOTAL FACTORY COST OF PRODUCT	79.18	74.94
GROSS PROFIT	20.82	25.06
ADMINISTRATIVE AND SELLING EXPENSES		
Administrative expenses	8.72	6.74
Selling expenses	7.81	7.81
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	16.53	14.55
INCOME BEFORE INTEREST EXPENSE	4.29	10.51
Interest expense	1.95	0.41
OPERATING INCOME (LOSS)	2.34	10.10
Other income	0.80	0.86
INCOME BEFORE INCOME TAXES	3.14	10.96

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS		
Ink	1.17%	1.84%
Film	1.58	1.58
Plates	1.81	1.98
Other chargeable materials	2.54	4.07
TOTAL OTHER CHARGEABLE MATERIALS	7.10	9.47
OUTSIDE SERVICES		
Composition	1.01	6.12
Offset preparation	0.80	0.27
Printing	0.39	0.00
Binding	4.19	0.00
Other outside services	0.94	0.22
TOTAL OUTSIDE SERVICES	7.33	6.61

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%
28.33	29.43	28.32
7.38	5.10	5.59
4.08	10.27	6.14
39.79	44.80	40.05
32.03	23.59	25.81
14.04	12.09	12.90
85.86	80.48	78.76
14.14	19.52	21.24
8.79	7.08	6.92
4.18	4.67	4.82
12.97	11.75	11.74
1.17	7.77	9.50
2.06	2.00	1.92
(0.89)	5.77	7.58
1.36	1.59	2.10
0.47	7.36	9.68

1.54%	0.83%	0.91%
1.07	1.03	1.06
1.15	1.67	1.82
3.62	1.57	1.80
7.38	5.10	5.59
1.65	0.23	0.27
0.14	0.36	0.20
0.43	0.40	0.52
0.91	7.24	2.19
0.95	2.04	2.96
4.08	10.27	6.14

SUPPORTING SCHEDULES - SALES = 100%

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL		
Salaries - executive	2.13%	2.79%
Direct wages	19.72	14.26
General factory salaries and wages	3.29	5.36
Packing, shipping and delivery wages	0.45	0.64
Payroll taxes	2.24	2.00
Employee benefits	2.49	3.38
TOTAL FACTORY PAYROLL	30.32	28.43
FACTORY EXPENSES		
Fixed Expenses		
Depreciation - real estate	0.38	0.40
Depreciation - other	2.55	2.25
Taxes - real estate	0.25	0.27
Taxes - other	0.18	0.41
Insurance	0.56	0.38
Building rent	0.83	(0.21)
Utilities - heat, light, etc.	1.41	1.46
Equipment rental	0.26	0.14
Total Fixed Expenses	6.42	5.10
Other Expenses		
Factory supplies and expense	3.16	4.05
Packing, shipping and delivery expense	0.73	0.62
Repairs and maintenance	1.77	1.02
Other factory expenses	0.89	0.78
Total Other Expenses	6.55	6.47
TOTAL FACTORY EXPENSES	12.97	11.57
ADMINISTRATIVE EXPENSES		
Salaries - executive	2.00	1.96
Salaries - office	2.40	1.49
Payroll taxes	0.31	0.26
Employee benefits	0.59	0.50
Bad debts	0.37	0.38
Office supplies and expenses	0.49	0.17
Professional fees	0.61	0.19
Taxes - business	0.20	0.24
Telephone	0.40	0.25
Other administrative expenses	1.35	1.30
TOTAL ADMINISTRATIVE EXPENSES	8.72	6.74
SELLING EXPENSES		
Salaries - executive	0.89	0.62
Salaries and commissions - salesmen	3.65	2.95
Salaries - sales office clerical	0.68	1.55
Payroll taxes	0.31	0.25
Employee benefits	0.28	0.47
Advertising	0.26	0.11
Travel and entertainment	0.61	0.52
Other selling expenses	1.13	1.34
TOTAL SELLING EXPENSES	7.81	7.81

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
0.59%	1.41%	1.28%
21.16	16.05	17.52
3.81	1.84	1.97
0.94	0.63	0.84
2.45	1.50	1.58
3.08	2.16	2.62
32.03	23.59	25.81
0.17	0.23	0.27
3.31	3.83	4.13
0.11	0.12	0.15
0.59	0.12	0.08
0.17	0.40	0.46
1.52	0.67	0.61
1.75	1.00	1.02
0.17	0.10	0.14
7.79	6.47	6.86
1.07	2.19	2.41
1.51	1.32	1.60
2.03	1.71	1.79
1.64	0.40	0.24
6.25	5.62	6.04
14.04	12.09	12.90
1.99	1.17	1.40
1.85	2.09	1.64
0.31	0.24	0.22
0.40	0.58	0.74
0.12	0.46	0.33
0.23	0.32	0.32
1.11	0.41	0.45
0.23	0.27	0.27
0.25	0.33	0.35
2.30	1.21	1.20
8.79	7.08	6.92
1.03	0.50	0.54
1.57	2.08	1.98
0.39	0.68	0.68
0.13	0.13	0.11
0.14	0.17	0.22
0.18	0.07	0.09
0.35	0.73	0.82
0.39	0.31	0.38
4.18	4.67	4.82

BALANCE SHEET

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
ASSETS		
CURRENT ASSETS		
Cash	1.33%	1.89%
Receivables	37.52	39.54
Inventories	18.34	14.41
Other current assets	2.17	0.28
TOTAL CURRENT ASSETS	59.36	56.12
FIXED ASSETS		
Real estate	16.23	19.59
Less: Accumulated depreciation	5.16	4.79
	11.07	14.80
Machinery and equipment	66.65	48.81
Less: Accumulated depreciation	41.83	21.59
	24.82	27.22
Other fixed assets	7.19	2.74
Less: Accumulated depreciation	4.31	1.09
	2.88	1.65
NET FIXED ASSETS	38.77	43.67
OTHER ASSETS	1.87	0.21
TOTAL ASSETS	100.00	100.00
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Notes payable	12.75	1.23
Accounts payable	14.24	11.05
Other current liabilities	14.76	18.45
TOTAL CURRENT LIABILITIES	41.75	30.73
LONG-TERM LIABILITIES	24.25	13.22
TOTAL LIABILITIES	66.00	43.95
SHAREHOLDERS' AND PROPRIETORS' EQUITY	34.00	56.05
TOTAL LIABILITIES AND EQUITY	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.42	1.83
QUICK RATIO	0.98	1.36
TOTAL LIABILITIES TO EQUITY	1.94	0.78
LONG-TERM LIABILITIES TO EQUITY	0.71	0.24
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.63	0.44

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
2.82%	5.53%	7.19%
26.38	30.16	27.88
14.70	14.51	12.98
8.55	2.02	2.67
52.45	52.22	50.72
8.03	10.31	11.49
4.12	3.04	3.73
3.91	7.27	7.76
62.40	61.71	67.67
29.47	28.90	34.06
33.93	32.81	33.61
5.44	3.24	3.19
2.30	1.67	1.81
3.14	1.57	1.38
40.98	41.65	42.75
6.57	6.13	6.53
100.00	100.00	100.00
34.30	8.18	6.85
17.52	16.66	12.09
7.88	9.65	11.24
59.70	34.49	30.18
19.50	31.46	30.83
79.20	65.95	61.01
20.80	34.05	38.99
100.00	100.00	100.00

0.88	1.51	1.68
0.63	1.09	1.25
3.81	1.94	1.56
0.94	0.92	0.79
0.47	0.47	0.50

SIGNIFICANT FACTS

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
INVESTMENT		
Average assets per employee - All employees	$ 29,555	$ 39,481
Average assets per factory employee (Excluding Executives)	39,467	50,476
Average net worth per employee - All employees	10,170	22,219
Average gross plant investment per factory employee (Excluding Executives)	34,353	34,708
Net worth percentage of fixed assets	91.49%	137.92%
EMPLOYEES		
Percent factory - All employees	80.89%	84.72%
Percent administrative - All employees	9.82	7.23
Percent sales - All employees	9.29	8.05
SALES - VALUE OF PRODUCT PRODUCED		
INCLUDING EXECUTIVES		
Sales per employee - All employees	$ 60,998	$ 75,793
Sales per factory employee	76,524	89,287
Sales less material per factory employee	47,494	58,308
Sales per administrative employee	731,402	1,385,179
EXCLUDING EXECUTIVES		
Sales per employee - All employees	66,801	83,430
Sales per factory employee	81,347	96,971
Sales less material per factory employee	50,475	63,340
SALES PER SALESMAN	982,751	2,230,185
SALES TO CURRENT ASSETS	363%	344%
PAYROLL - INCLUDING TAXES AND BENEFITS		
INCLUDING EXECUTIVES		
Total payroll percentage of sales	41.43%	38.48%
Factory payroll percentage of gross plant investment	83.66	79.77
Payroll per employee - All employees	$ 24,234	$ 28,881
Payroll per factory employee	21,884	25,097
Payroll per administrative employee	34,685	55,173
Payroll per sales employee	36,378	54,322
PAYROLL - EXCLUDING TAXES AND BENEFITS		
EXCLUDING EXECUTIVES		
Payroll per employee - All employees	$ 18,863	$ 21,364
Payroll per factory employee	17,668	19,249
Payroll per administrative employee	18,230	17,861
Payroll per sales employee	30,192	45,341
EXECUTIVE PAYROLL		
Payroll per executive - All executives	42,567	45,903
Payroll per factory executive	29,963	32,341
Payroll per administrative executive	60,448	91,858
Payroll per sales executive	45,130	73,660
RECEIVABLES		
Collection period	68.1	81.3
PROFIT		
Gross profit percentage of sales	20.82%	25.06%
Average gross profit per factory employee	$ 16,871	$ 24,826
Income before taxes percentage of sales	3.14%	10.96%
Average income before taxes per employee	$ 2,082	$ 8,765

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 41,354	$ 49,025	$ 49,031
49,168	63,529	60,530
12,879	16,312	18,405
37,388	46,569	49,102
62.88%	99.40%	119.69%
85.55%	82.10%	84.92%
8.72	11.27	8.43
5.73	6.63	6.65
$ 73,350	$ 85,948	$ 77,507
86,131	106,782	91,255
50,407	56,812	54,779
959,584	877,959	986,030
76,941	91,917	82,534
87,734	112,565	95,300
51,283	59,871	57,235
1,197,268	1,440,474	1,214,702
384%	362%	351%
39.84%	31.24%	33.34%
90.09	60.12	58.52
$ 27,325	$ 26,042	$ 25,858
25,230	23,671	23,491
38,836	35,982	40,093
42,092	48,718	45,738
$ 21,679	$ 20,601	$ 20,033
21,171	19,239	18,982
21,057	20,704	20,428
32,315	42,897	39,328
59,960	45,758	54,339
33,464	24,833	24,613
95,876	55,651	68,206
63,148	42,722	42,835
55.0	65.4	66.7
14.14%	19.52%	21.24%
$ 13,913	$ 21,702	$ 20,611
0.47%	7.36%	9.68%
$ 1,261	$ 5,992	$ 7,474

RETURN ON INVESTMENT - PER $100 OF SALES

	SHEET-FED OFFSET	
	ALL FIRMS	PROFIT LEADERS
INVESTMENT		
Current Assets:		
Cash	$ 0.56	$ 1.00
Receivables	17.67	20.74
Inventories	9.05	7.51
Marketable securities	0.00	0.00
Other current assets	1.19	0.15
	28.47	29.40
Plant Investment:		
Land and building	8.32	10.81
Machinery and equipment	31.79	25.96
Other fixed assets	3.32	1.49
	43.43	38.26
Non-Current Assets	0.96	0.11
TOTAL INVESTMENT	72.86	67.77
INVESTMENT TURNOVER PER $100 OF SALES	137.25%	147.56%
EARNINGS		
Cost of Product	$79.18	$74.94
Selling Expenses	7.81	7.81
Administrative Expenses	8.72	6.74
	95.71	89.49
Income Before Interest, Other Income, and Taxes	4.29	10.51
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	5.89%	15.51%

** Sample insufficient for Profit Leaders.

WEB-FED OFFSET**	COMBINATION OFFSET	
ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 1.77	$ 2.94	$ 3.87
14.51	16.91	17.24
7.91	8.09	7.91
5.68	0.02	0.00
0.84	1.22	1.66
30.71	29.18	30.68
6.22	6.25	6.93
37.63	37.11	43.33
2.88	1.89	1.99
46.73	45.25	52.25
3.42	3.90	4.59
80.86	78.33	87.52
123.67%	127.67%	114.26%
$85.86	$80.48	$78.76
4.18	4.67	4.82
8.79	7.08	6.92
98.83	92.23	90.50
1.17	7.77	9.50
1.45%	9.92%	10.85%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%
FACTORY PAYROLL	45.73	42.78	48.21
FACTORY EXPENSES	21.44	20.90	18.65
TOTAL FACTORY COST OF PRODUCT	67.17	63.68	66.86
GROSS PROFIT	32.83	36.32	33.14
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	13.62	11.40	14.88
Selling expenses	10.59	9.05	10.35
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	24.21	20.45	25.23
INCOME BEFORE INTEREST EXPENSE	8.62	15.87	7.91
Interest expense	3.28	2.49	4.60
OPERATING INCOME	5.34	13.38	3.31
Other income	1.70	2.94	1.50
INCOME BEFORE INCOME TAXES	7.04	16.32	4.81

** Sample insufficient for Profit Leaders.

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.66%	2.55%	4.09%
Direct wages	30.40	27.67	32.41
General factory salaries and wages	4.59	4.60	3.65
Packing, shipping and delivery wages	1.06	1.51	0.42
Payroll taxes	3.12	2.50	3.54
Employee benefits	3.90	3.95	4.10
TOTAL FACTORY PAYROLL	45.73	42.78	48.21
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.54	0.52	0.35
Depreciation - other	5.18	5.99	3.73
Taxes - real estate	0.34	0.31	0.39
Taxes - other	0.31	0.42	0.29
Insurance	0.70	0.71	1.05
Building rent	1.44	0.80	1.19
Utilities - heat, light, etc.	2.00	1.79	2.47
Equipment rental	0.37	0.23	0.03
Total Fixed Expenses	10.88	10.77	9.50
Other Expenses			
Factory supplies and expense	4.48	4.24	4.00
Packing, shipping and delivery expense	1.75	2.46	1.30
Repairs and maintenance	2.99	2.54	2.24
Other factory expenses	1.34	0.89	1.61
Total Other Expenses	10.56	10.13	9.15
TOTAL FACTORY EXPENSES	21.44	20.90	18.65
ADMINISTRATIVE EXPENSES			
Salaries - executive	2.60	2.30	4.58
Salaries - office	3.88	2.81	2.97
Payroll taxes	0.46	0.37	0.56
Employee benefits	1.02	1.07	0.64
Bad debts	0.50	0.54	1.40
Office supplies and expenses	0.72	0.45	0.54
Professional fees	0.86	0.65	1.32
Taxes - business	0.42	0.51	0.34
Telephone	0.60	0.49	0.62
Other administrative expenses	2.56	2.21	1.91
TOTAL ADMINISTRATIVE EXPENSES	13.62	11.40	14.88
SELLING EXPENSES			
Salaries - executive	1.34	0.98	0.82
Salaries and commissions - salesmen	4.77	3.50	4.76
Salaries - sales office clerical	1.12	1.47	1.18
Payroll taxes	0.35	0.22	0.47
Employee benefits	0.35	0.42	0.51
Advertising	0.34	0.19	0.25
Travel and entertainment	1.02	1.12	0.99
Other selling expenses	1.30	1.15	1.37
TOTAL SELLING EXPENSES	10.59	9.05	10.35

** Sample insufficient for Profit Leaders.

REPORT ON OPERATIONS - SALES = 100%

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	25.82	27.47	20.00
Other chargeable materials	6.15	6.82	7.82
Outside services	6.42	5.45	14.20
TOTAL MATERIALS	38.39	39.74	42.02
FACTORY PAYROLL	28.37	25.94	28.62
FACTORY EXPENSES	13.08	12.49	10.56
TOTAL FACTORY COST OF PRODUCT	79.84	78.17	81.20
GROSS PROFIT	20.16	21.83	18.80
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	8.34	6.87	8.31
Selling expenses	6.62	5.47	6.03
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	14.96	12.34	14.34
INCOME BEFORE INTEREST EXPENSE	5.20	9.49	4.46
Interest expense	1.95	1.45	2.62
OPERATING INCOME	3.25	8.04	1.84
Other income	0.97	1.73	0.90
INCOME BEFORE INCOME TAXES	4.22	9.77	2.74

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS			
Ink	0.91%	1.05%	1.73%
Film	1.44	1.30	1.10
Plates	1.62	1.74	1.95
Other chargeable materials	2.18	2.73	3.04
TOTAL OTHER CHARGEABLE MATERIALS	6.15	6.82	7.82
OUTSIDE SERVICES			
Composition	0.57	0.30	2.50
Offset preparation	0.80	0.30	0.53
Printing	0.59	0.60	0.63
Binding	2.86	1.66	10.08
Other outside services	1.60	2.59	0.46
TOTAL OUTSIDE SERVICES	6.42	5.45	14.20

** Sample insufficient for Profit Leaders.

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	1.66%	1.57%	2.40%
Direct wages	18.77	16.66	19.05
General factory salaries and wages	2.94	2.84	2.42
Packing, shipping and delivery wages	0.63	0.90	0.23
Payroll taxes	1.97	1.54	2.12
Employee benefits	2.40	2.43	2.40
TOTAL FACTORY PAYROLL	28.37	25.94	28.62
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.34	0.32	0.20
Depreciation - other	3.06	3.54	1.99
Taxes - real estate	0.22	0.19	0.23
Taxes - other	0.19	0.25	0.15
Insurance	0.44	0.43	0.61
Building rent	0.90	0.44	0.74
Utilities - heat, light, etc.	1.23	1.09	1.48
Equipment rental	0.25	0.14	0.02
Total Fixed Expenses	6.63	6.40	5.42
Other Expenses			
Factory supplies and expense	2.75	2.60	2.49
Packing, shipping and delivery expense	1.06	1.44	0.62
Repairs and maintenance	1.83	1.52	1.19
Other factory expenses	0.81	0.53	0.84
Total Other Expenses	6.45	6.09	5.14
TOTAL FACTORY EXPENSES	13.08	12.49	10.56
ADMINISTRATIVE EXPENSES			
Salaries - executive	1.63	1.39	2.54
Salaries - office	2.37	1.70	1.65
Payroll taxes	0.29	0.23	0.30
Employee benefits	0.61	0.66	0.36
Bad debts	0.29	0.32	0.68
Office supplies and expenses	0.44	0.27	0.30
Professional fees	0.53	0.38	0.86
Taxes - business	0.25	0.30	0.20
Telephone	0.37	0.29	0.35
Other administrative expenses	1.56	1.33	1.07
TOTAL ADMINISTRATIVE EXPENSES	8.34	6.87	8.31
SELLING EXPENSES			
Salaries - executive	0.82	0.58	0.41
Salaries and commissions - salesmen	3.02	2.09	2.89
Salaries - sales office clerical	0.68	0.91	0.70
Payroll taxes	0.22	0.14	0.28
Employee benefits	0.22	0.26	0.31
Advertising	0.20	0.11	0.12
Travel and entertainment	0.63	0.67	0.53
Other selling expenses	0.83	0.71	0.79
TOTAL SELLING EXPENSES	6.62	5.47	6.03

** Sample insufficient for Profit Leaders.

BALANCE SHEET

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	2.72%	5.26%	1.46%
Receivables	33.84	29.62	35.30
Inventories	16.61	12.76	18.22
Other current assets	2.23	1.96	1.62
TOTAL CURRENT ASSETS	55.40	49.60	56.60
FIXED ASSETS			
Real estate	13.31	14.19	21.83
Less: Accumulated depreciation	4.43	4.17	2.26
	8.88	10.02	19.57
Machinery and equipment	62.32	62.94	64.67
Less: Accumulated depreciation	33.08	30.02	45.49
	29.24	32.92	19.18
Other fixed assets	5.74	3.45	6.13
Less: Accumulated depreciation	3.04	1.70	4.34
	2.70	1.75	1.79
NET FIXED ASSETS	40.82	44.69	40.54
OTHER ASSETS	3.78	5.71	2.86
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	13.76	4.98	15.73
Accounts payable	14.14	11.73	22.20
Other current liabilities	12.21	13.21	15.21
TOTAL CURRENT LIABILITIES	40.11	29.92	53.14
LONG-TERM LIABILITIES	26.28	29.04	27.07
TOTAL LIABILITIES	66.39	58.96	80.21
SHAREHOLDERS' AND PROPRIETORS' EQUITY	33.61	41.04	19.79
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.38	1.66	1.07
QUICK RATIO	0.97	1.23	0.72
TOTAL LIABILITIES TO EQUITY	1.98	1.44	4.05
LONG-TERM LIABILITIES TO EQUITY	0.78	0.71	1.37
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.53	0.48	0.70

** Sample insufficient for Profit Leaders.

SIGNIFICANT FACTS

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 35,250	$ 45,714	$ 41,035
Average assets per factory employee (Excluding Executives)	45,502	56,770	56,410
Average net worth per employee - All employees	11,577	17,877	11,340
Average gross plant investment per factory employee (Excluding Executives)	36,120	45,248	45,461
Net worth percentage of fixed assets	95.12%	110.22%	40.58%
EMPLOYEES			
Percent factory - All employees	81.81%	84.44%	80.32%
Percent administrative - All employees	9.84	8.61	12.16
Percent sales - All employees	8.35	6.95	7.52
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 66,299	$ 74,877	$ 83,034
Sales per factory employee	81,856	88,695	105,686
Sales less material per factory employee	48,637	53,256	58,164
Sales per administrative employee	735,015	917,253	955,689
EXCLUDING EXECUTIVES			
Sales per employee - All employees	70,941	79,949	93,675
Sales per factory employee	85,769	92,787	114,644
Sales less material per factory employee	51,006	55,767	63,061
SALES PER SALESMAN	1,128,833	1,398,276	1,324,273
SALES TO CURRENT ASSETS	371%	360%	375%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	38.23%	33.90%	38.06%
Factory payroll percentage of gross plant investment	80.58	59.15	66.83
Payroll per employee - All employees	$ 24,003	$ 25,153	$ 29,285
Payroll per factory employee	21,761	22,757	26,779
Payroll per administrative employee	33,062	36,715	42,444
Payroll per sales employee	37,780	45,381	50,242
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 18,938	$ 19,758	$ 22,905
Payroll per factory employee	17,810	18,606	21,606
Payroll per administrative employee	19,065	19,623	18,330
Payroll per sales employee	31,843	38,745	42,538
EXECUTIVE PAYROLL			
Payroll per executive - All executives	44,985	49,774	39,819
Payroll per factory executive	26,900	27,515	32,105
Payroll per administrative executive	58,959	62,652	64,699
Payroll per sales executive	46,715	45,862	36,665
RECEIVABLES			
Collection period	66.0	68.9	63.6
PROFIT			
Gross profit percentage of sales	20.16%	21.83%	18.80%
Average gross profit per factory employee	$ 17,205	$ 20,441	$ 21,949
Income before taxes percentage of sales	4.22%	9.77%	2.74%
Average income before taxes per employee	$ 3,002	$ 7,322	$ 3,200

** Sample insufficient for Profit Leaders.

RETURN ON INVESTMENT - PER $100 OF SALES

	PRINTING AND BINDING		PRINTING ONLY**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 1.33	$ 2.83	$ 0.73
Receivables	17.15	17.71	16.47
Inventories	8.64	7.57	8.88
Marketable securities	0.01	0.00	0.00
Other current assets	1.27	1.21	0.88
	28.40	29.32	26.96
Plant Investment:			
Land and building	7.24	8.28	14.08
Machinery and equipment	32.93	38.84	29.23
Other fixed assets	2.87	2.09	2.49
	43.04	49.21	45.80
Non-Current Assets	2.25	3.83	1.25
TOTAL INVESTMENT	73.69	82.36	74.01
INVESTMENT TURNOVER PER $100 OF SALES	135.70%	121.42%	135.12%
EARNINGS			
Cost of Product	$79.84	$78.17	$81.20
Selling Expenses	6.62	5.47	6.03
Administrative Expenses	8.34	6.87	8.31
	94.80	90.51	95.54
Income Before Interest, Other Income, and Taxes	5.20	9.49	4.46
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.06%	11.52%	6.03%

** Sample insufficient for Profit Leaders.

ABSOLUTE DATA

		AVERAGE FIRM REPORTING**		
	NUMBER OF PARTICIPATING FIRMS	TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	34	$ 5,607,000	$10,074,000	$ 529,000
TOTAL - PROFIT LEADERS*	10	7,998,000	13,976,000	1,413,000
BY SIZE OF FIRM				
ALL FIRMS				
$500,000-$1,500,000	2	719,000	1,262,000	(19,000)
$1,500,000-$5,000,000	9	1,652,000	3,297,000	49,000
$5,000,000-$10,000,000	10	4,156,000	7,659,000	341,000
Over $10,000,000	13	10,214,000	17,979,000	1,090,000
PROFIT LEADERS				
$5,000,000-$10,000,000	3	4,766,000	7,369,000	765,000
Over $10,000,000	6	10,573,000	18,910,000	1,910,000
BY PROCESS SPECIALTY				
ALL FIRMS				
Sheet-Fed Offset	20	5,375,000	10,182,000	471,000
Web-Fed Offset	4	5,029,000	8,235,000	315,000
Combination--Sheet-Fed/Web-Fed Offset	9	6,577,000	11,244,000	808,000
PROFIT LEADERS				
Sheet-Fed Offset	3	11,057,000	20,672,000	2,177,000
Combination--Sheet-Fed/Web-Fed Offset	6	6,753,000	11,101,000	1,054,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Printing and Binding	27	6,050,000	10,880,000	559,000
Printing Only	6	3,222,000	6,517,000	459,000
PROFIT LEADERS				
Printing and Binding	9	8,019,000	13,699,000	1,305,000

---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in these books, these figures are arithmetic averages. See explanatory note on page 42.

HOW THE NUMBERS ARE COMPUTED

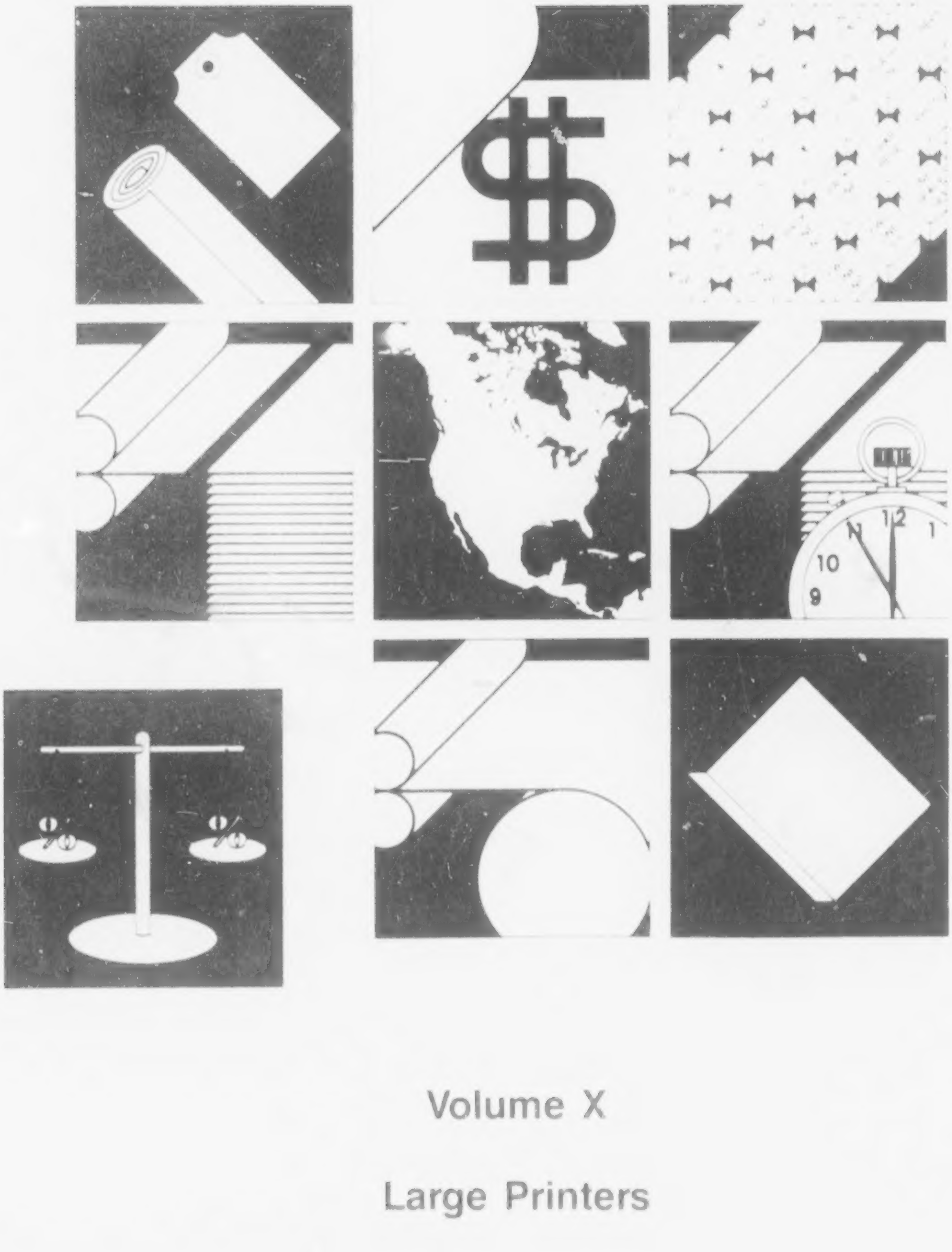
The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 ≈ 20.7%	

A8740-1.10U
10/87

1987 Financial Ratio Study



Volume X

Large Printers

1987
FINANCIAL
RATIO STUDY

Volume X: Large Printers

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

Offices
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 145 Large Printers (annual sales volume of $10,000,000 or more) across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales from $10 to $20 million, sales from $20 to $40 million, etc.; and by product specialty - for example, Commercial and Advertising, Magazine and Periodical, etc. Readers can compare their firm's operations with other firms having the same sales volume, or product specialty in five areas: Operations based on Value Added and its Supporting Schedules, Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H R Margolis Company

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

VALUE ADDED - WHAT IT MEANS TO YOU................................ 4- 5

CHAPTER 1 - BY SIZE OF FIRM....................................... 6-19
  Report on Operations - Value Added = 100%....................... 6- 7
  Supporting Schedules - Value Added = 100%....................... 8- 9
  Report on Operations - Sales = 100%............................. 10-11
  Supporting Schedules - Sales = 100%............................. 10-13
  Balance Sheet... 14-15
  Significant Facts... 16-17
  Return on Investment - Per $100 of Sales........................ 18-19

CHAPTER 2 - BY PRODUCT SPECIALTY.................................. 20-33
  Report on Operations - Value Added = 100%....................... 20-21
  Supporting Schedules - Value Added = 100%....................... 22-23
  Report on Operations - Sales = 100%............................. 24-25
  Supporting Schedules - Sales = 100%............................. 24-27
  Balance Sheet... 28-29
  Significant Facts... 30-31
  Return on Investment - Per $100 of Sales........................ 32-33

ABSOLUTE DATA... 34-35

Printing Industries of America, Inc. recognizes that the industry's largest printing firms have some unique needs which are not generally being met in the industry. For this reason PIA has developed programs and services for the benefit of these companies. One of these services is this special ratio study undertaken exclusively for companies of this size. Another effort on the part of PIA to meet the needs of large firms is the Conference Board of Major Printers. Listed below is information regarding this PIA special section.

- CBMP is the only organization dedicated to the needs of the large printers.
- Membership is limited to Chief Executive Officers of selected printing companies.
- CBMP pursues specific projects of special interest to large printers, via special presentations at the bi-annual Meetings, and via montly *UP-DATE SURVEYS* and *REPORTS* on current topics of interest.
- CBMP represents the interests of the major printers within PIA, by assuring that appropriate PIA programs are offered to its members.
- CBMP provides basic leadership to the printing industry as a whole.
- CBMP studies the impact of government regulations and legislation on the large printing organizations.
- CBMP studies the impact on large printers of suppliers of equipment and materials.
- CBMP strives toward better understanding of customer needs through its own special studies.
- CBMP is comprised of over 40 member companies who produce every type of printed product.
- CBMP is dedicated to provide guidance in the area of quality control, materials management, and other management disciplines for the large printer.

Laura M. Yoder, Exec. Director
Conference-Board of Major Printers
(703) 841-4803

VALUE ADDED DEFINED

Value added is a technical term for sales of a company's own manufacture. It is calculated as sales less material costs and outside services.

Sales		$100.00
Less: Materials		
Paper	$ 23.00	
Other chargeable materials	5.00	
Outside services	8.00	36.00
Value Added		$ 64.00

Material costs include paper and other chargeable materials such as ink, film, plates etc., but not general supplies or the repair and maintenance of equipment. Outside services are purchases of job-related services - composition, offset preparation, printing, bindery, etc.

Value added financial management is based on a fundamental principle of accounting: Profit is achieved from sales of a company's own manufacture. Time and time again, when printing companies show high sales but low profits, the root of the problem is in the failure to pay attention to the relationship between value added and profit performance.

VALUE ADDED AND PROFITS

Since value added is sales less material costs, it becomes a critical factor in paying your remaining expenses - expenses such as factory labor, other factory expenses, administrative expenses, selling expenses, and interest.

What is left is profit.

All sales do not contribute equally to fixed costs and profits. There are "good sales" and "better sales." Good sales are sales that require more than an average amount of materials and outside services. As a result, they have less value added with which to cover fixed costs and to produce a profit. They are called "good sales" simply because there are no "bad sales" in the printing industry.

Better sales require fewer materials and more inside sales - sales of your company's own manufacture. This type of sale generously covers overhead and pays more dollars into profits. Printing firms that follow value added financial management procedures do all work inside unless they cannot avoid sending it out.

A VALUE ADDED STATEMENT OF OPERATIONS

In keeping with the value added concept, operating statements are more meaningful when prepared on the basis of inside sales. In this type of statement presentation, management starts its financial analysis with value added instead of the sales column. This eliminates the distortion introduced by material costs. For example, in comparing percentages based on sales of a short-run, sheet-fed company and a web offset firm, we could be faced with a significant difference in ratios because of differences in material costs. Although it would appear that the web offset operation had a lower factory labor cost because a substantial amount of its sales were materials, this might, in fact, not be the case at all. Instead the factory labor cost could be more or less than its counterpart sheet-fed operation as it relates to the value added produced by this labor.

	COMPANY S SHEET-FED		COMPANY W WEB-FED	
		% OF SALES		% OF SALES
SALES	$1,000,000	100.00%	$1,000,000	100.00%
MATERIALS				
Paper	197,300	19.73	387,900	38.79
Other chargeable materials	42,800	4.28	35,000	3.50
Outside services	87,900	8.79	30,000	3.00
	328,000	32.80	452,900	45.29
		% OF VALUE ADDED		% OF VALUE ADDED
VALUE ADDED	672,000	100.00%	547,100	100.00%
FACTORY PAYROLL	241,800	35.98	177,500	32.44
FACTORY EXPENSES	121,800	18.13	101,300	18.52
	363,600	54.11	278,800	50.96
GROSS PROFIT	308,400	45.89	268,300	49.04
SELLING AND ADMINISTRATIVE EXPENSES	187,500	27.90	141,700	25.90
INCOME BEFORE INTEREST EXPENSE	120,900	17.99	126,600	23.14
Interest expense	18,300	2.72	7,900	1.44
OPERATING INCOME	102,600	15.27	118,700	21.70
Other income	10,200	1.52	16,200	2.96
INCOME BEFORE INCOME TAXES	$ 112,800	16.79%	$ 134,900	24.66%

The point is that every company's product mix is different, and by using statements of operations based on value added, this product mix difference is eliminated. Consequently, value added is a better statement with which to evaluate your operations.

REPORT ON OPERATIONS - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	44.67	39.33	44.49	36.42
FACTORY EXPENSES	21.19	18.96	20.03	17.14
TOTAL FACTORY COST OF PRODUCT	65.86	58.29	64.52	53.56
GROSS PROFIT	34.14	41.71	35.48	46.44
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	10.90	10.75	11.65	13.07
Selling expenses	13.15	11.83	14.68	14.80
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	24.05	22.58	26.33	27.87
INCOME BEFORE INTEREST EXPENSE	10.09	19.13	9.15	18.57
Interest expense	3.28	2.01	3.59	3.18
OPERATING INCOME	6.81	17.12	5.56	15.39
Other income	1.03	1.41	0.83	1.21
INCOME BEFORE INCOME TAXES	7.84	18.53	6.39	16.60

* See page 10 for the definition of "Profit Leaders".
** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
X	X	X	X	X	X
X	X	X	X	X	X
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
45.25	41.07	44.61	41.55	44.95	38.90
21.96	19.62	23.30	23.08	21.26	26.73
67.21	60.69	67.91	64.63	66.21	65.63
32.79	39.31	32.09	35.37	33.79	34.37
10.28	9.42	9.77	8.26	7.30	10.65
11.78	10.35	11.69	7.64	9.56	8.68
22.06	19.77	21.46	15.90	16.86	19.33
10.73	19.54	10.63	19.47	16.93	15.04
2.72	1.03	2.99	1.64	4.25	6.08
8.01	18.51	7.64	17.83	12.68	8.96
1.01	1.76	2.28	1.12	0.03	1.14
9.02	20.27	9.92	18.95	12.71	10.10

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	3.02%	3.03%	3.00%	2.92%
Direct wages	28.04	23.55	29.00	23.42
General factory salaries and wages	4.64	4.65	3.98	3.45
Packing, shipping and delivery wages	1.56	1.27	1.63	1.20
Payroll taxes	2.72	2.29	2.72	1.88
Employee benefits	4.69	4.54	4.16	3.55
TOTAL FACTORY PAYROLL	44.67	39.33	44.49	36.42
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.48	0.45	0.48	0.41
Depreciation - other	5.42	4.96	5.04	4.21
Taxes - real estate	0.39	0.31	0.37	0.28
Taxes - other	0.31	0.29	0.38	0.41
Insurance	0.53	0.42	0.60	0.47
Building rent	1.24	0.95	1.59	1.62
Utilities - heat, light, etc.	2.35	2.06	2.12	1.65
Equipment rental	0.83	0.42	0.65	0.35
Total Fixed Expenses	11.55	9.86	11.23	9.40
Other Expenses				
Factory supplies and expense	3.95	3.72	3.53	3.02
Packing, shipping and delivery expense	1.68	1.56	1.72	1.47
Repairs and maintenance	2.58	1.87	2.38	1.63
Other factory expenses	1.43	1.95	1.17	1.62
Total Other Expenses	9.64	9.10	8.80	7.74
TOTAL FACTORY EXPENSES	21.19	18.96	20.03	17.14
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.42	2.79	2.90	4.08
Salaries - office	2.62	2.46	2.62	2.77
Payroll taxes	0.32	0.31	0.34	0.35
Employee benefits	0.75	0.92	0.68	0.81
Bad debts	0.64	0.56	0.68	0.81
Office supplies and expenses	0.51	0.39	0.58	0.55
Professional fees	0.78	0.73	0.89	1.01
Taxes - business	0.15	0.17	0.18	0.21
Telephone	0.51	0.41	0.60	0.54
Other administrative expenses	2.20	2.01	2.18	1.94
TOTAL ADMINISTRATIVE EXPENSES	10.90	10.75	11.65	13.07
SELLING EXPENSES				
Salaries - executive	1.32	1.23	1.74	1.98
Salaries and commissions - salesmen	6.35	5.40	7.26	6.87
Salaries - sales office clerical	1.49	1.43	1.61	1.71
Payroll taxes	0.46	0.40	0.53	0.59
Employee benefits	0.58	0.50	0.58	0.55
Advertising	0.49	0.36	0.54	0.48
Travel and entertainment	1.08	0.93	1.22	1.32
Other selling expenses	1.38	1.58	1.20	1.30
TOTAL SELLING EXPENSES	13.15	11.83	14.68	14.80

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
3.20%	3.30%	3.21%	3.44%	1.22%	0.63%
27.49	24.24	25.41	20.18	30.06	24.35
5.24	4.79	5.58	6.20	4.80	6.08
1.41	1.16	1.86	2.81	1.15	1.24
2.73	2.49	2.63	2.74	3.49	2.74
5.18	5.09	5.92	6.18	4.23	3.86
45.25	41.07	44.61	41.55	44.95	38.90
0.46	0.48	0.45	0.44	0.88	0.63
5.58	5.21	6.52	6.98	7.58	5.76
0.38	0.31	0.51	0.46	0.71	0.28
0.27	0.24	0.17	0.01	0.10	0.31
0.46	0.39	0.40	0.47	0.22	0.66
1.01	0.47	0.54	0.58	0.04	0.63
2.43	2.15	2.90	3.00	3.65	3.37
1.04	0.49	0.76	0.52	0.06	2.14
11.63	9.74	12.25	12.46	13.24	13.78
4.18	4.15	5.10	5.34	3.65	5.24
1.67	1.56	1.53	1.34	1.32	1.84
2.64	1.97	3.06	2.01	2.92	3.83
1.84	2.20	1.36	1.93	0.13	2.04
10.33	9.88	11.05	10.62	8.02	12.95
21.96	19.62	23.30	23.08	21.26	26.73
1.92	1.92	2.12	1.48	0.97	1.67
2.79	2.33	1.79	1.68	2.35	3.94
0.30	0.28	0.24	0.27	0.25	0.51
0.87	1.20	0.61	0.43	0.93	0.62
0.58	0.38	0.73	0.48	0.14	0.79
0.48	0.25	0.36	0.43	0.44	0.29
0.68	0.58	0.64	0.39	0.44	0.41
0.12	0.12	0.09	0.31	0.00	0.02
0.42	0.33	0.33	0.15	0.24	0.76
2.12	2.03	2.86	2.64	1.54	1.64
10.28	9.42	9.77	8.26	7.30	10.65
0.76	0.71	1.42	0.62	0.44	0.72
5.56	4.26	4.95	5.67	5.05	4.86
1.45	1.46	1.32	0.23	0.96	0.30
0.40	0.29	0.42	0.11	0.24	0.27
0.57	0.48	0.73	0.47	0.26	0.34
0.45	0.29	0.40	0.19	0.41	0.44
0.95	0.71	0.90	0.28	0.75	1.13
1.64	2.15	1.55	0.07	1.45	0.62
11.78	10.35	11.69	7.64	9.56	8.68

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	28.67	24.13	28.27	24.66
Other chargeable materials	6.07	5.77	5.27	4.25
Outside services	7.48	6.91	7.85	7.46
TOTAL MATERIALS	42.22	36.81	41.39	36.37
FACTORY PAYROLL	25.70	24.91	26.08	23.31
FACTORY EXPENSES	12.07	11.91	11.61	10.89
TOTAL FACTORY COST OF PRODUCT	79.99	73.63	79.08	70.57
GROSS PROFIT	20.01	26.37	20.92	29.43
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	6.32	6.72	6.76	8.13
Selling expenses	7.76	7.66	8.67	9.59
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	14.08	14.38	15.43	17.72
INCOME BEFORE INTEREST EXPENSE	5.93	11.99	5.49	11.71
Interest expense	1.84	1.27	2.06	1.99
OPERATING INCOME	4.09	10.72	3.43	9.72
Other income	0.58	0.85	0.49	0.73
INCOME BEFORE INCOME TAXES	4.67	11.57	3.92	10.45

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS				
Ink	2.79%	2.13%	2.27%	1.52%
Film	0.96	1.11	1.06	1.02
Plates	0.95	0.99	1.02	0.91
Other chargeable materials	1.37	1.54	0.92	0.80
TOTAL OTHER CHARGEABLE MATERIALS	6.07	5.77	5.27	4.25
OUTSIDE SERVICES				
Composition	0.43	0.86	0.62	1.78
Offset preparation	1.05	0.81	1.36	1.10
Printing	1.61	0.81	1.20	0.83
Binding	2.35	2.10	2.77	1.83
Other outside services	2.04	2.33	1.90	1.92
TOTAL OUTSIDE SERVICES	7.48	6.91	7.85	7.46

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
26.99	22.27	36.43	29.98	34.40	27.49
7.03	7.05	6.43	5.93	7.12	6.78
7.89	7.41	5.40	4.46	4.84	2.70
41.91	36.73	48.26	40.37	46.36	36.97
26.01	25.99	23.08	24.74	24.22	24.52
12.46	12.29	12.17	13.83	11.04	16.82
80.38	75.01	83.51	78.94	81.62	78.31
19.62	24.99	16.49	21.06	18.38	21.69
6.10	5.97	5.08	4.91	3.78	6.72
7.29	6.80	5.62	4.48	4.86	5.49
13.39	12.77	10.70	9.39	8.64	12.21
6.23	12.22	5.79	11.67	9.74	9.48
1.47	0.67	1.57	0.98	1.74	3.83
4.76	11.55	4.22	10.69	8.00	5.65
0.57	1.06	1.09	0.67	0.06	0.72
5.33	12.61	5.31	11.36	8.06	6.37
3.08%	2.15%	3.62%	3.60%	5.89%	3.99%
0.99	1.28	0.47	0.99	0.40	0.57
0.96	1.10	0.64	0.95	0.56	0.71
2.00	2.52	1.70	0.39	0.27	1.51
7.03	7.05	6.43	5.93	7.12	6.78
0.19	0.32	0.21	0.02	0.50	0.87
0.71	0.65	0.83	0.54	0.00	0.43
2.40	1.01	1.29	0.19	0.33	0.30
2.04	2.33	1.72	2.37	1.02	0.84
2.55	3.10	1.35	1.34	2.99	0.26
7.89	7.41	5.40	4.46	4.84	2.70

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	1.75%	1.93%	1.77%	1.92%
Direct wages	16.11	14.98	16.98	14.96
General factory salaries and wages	2.68	2.88	2.33	2.14
Packing, shipping and delivery wages	0.87	0.78	0.92	0.75
Payroll taxes	1.59	1.47	1.61	1.22
Employee benefits	2.70	2.87	2.47	2.32
TOTAL FACTORY PAYROLL	25.70	24.91	26.08	23.31
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.28	0.29	0.28	0.26
Depreciation - other	3.06	3.06	2.92	2.64
Taxes - real estate	0.22	0.20	0.21	0.18
Taxes - other	0.18	0.18	0.22	0.24
Insurance	0.30	0.26	0.34	0.29
Building rent	0.71	0.59	0.91	0.99
Utilities - heat, light, etc.	1.33	1.26	1.22	1.04
Equipment rental	0.47	0.27	0.39	0.22
Total Fixed Expenses	6.55	6.11	6.49	5.86
Other Expenses				
Factory supplies and expense	2.31	2.38	2.09	2.00
Packing, shipping and delivery expense	0.91	0.97	0.96	0.92
Repairs and maintenance	1.45	1.16	1.38	1.04
Other factory expenses	0.85	1.29	0.69	1.07
Total Other Expenses	5.52	5.80	5.12	5.03
TOTAL FACTORY EXPENSES	12.07	11.91	11.61	10.89
ADMINISTRATIVE EXPENSES				
Salaries - executive	1.39	1.74	1.68	2.51
Salaries - office	1.53	1.54	1.53	1.76
Payroll taxes	0.19	0.19	0.20	0.22
Employee benefits	0.44	0.57	0.40	0.49
Bad debts	0.37	0.34	0.39	0.49
Office supplies and expenses	0.30	0.25	0.34	0.36
Professional fees	0.45	0.47	0.51	0.65
Taxes - business	0.09	0.10	0.10	0.12
Telephone	0.30	0.26	0.36	0.36
Other administrative expenses	1.26	1.26	1.25	1.17
TOTAL ADMINISTRATIVE EXPENSES	6.32	6.72	6.76	8.13
SELLING EXPENSES				
Salaries - executive	0.76	0.78	1.02	1.28
Salaries and commissions - salesmen	3.75	3.37	4.28	4.26
Salaries - sales office clerical	0.89	0.97	0.97	1.21
Payroll taxes	0.28	0.26	0.32	0.39
Employee benefits	0.35	0.34	0.35	0.39
Advertising	0.29	0.25	0.32	0.33
Travel and entertainment	0.63	0.63	0.72	0.90
Other selling expenses	0.81	1.06	0.69	0.83
TOTAL SELLING EXPENSES	7.76	7.66	8.67	9.59

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
1.84%	2.06%	1.73%	2.07%	0.75%	0.40%
15.76	15.48	13.03	11.89	16.16	15.36
3.04	2.95	2.95	3.79	2.64	3.82
0.80	0.73	0.96	1.64	0.52	0.78
1.59	1.59	1.37	1.63	1.88	1.73
2.98	3.18	3.04	3.72	2.27	2.43
26.01	25.99	23.08	24.74	24.22	24.52
0.27	0.32	0.23	0.26	0.43	0.40
3.12	3.20	3.44	4.16	3.84	3.62
0.21	0.19	0.25	0.27	0.34	0.18
0.16	0.15	0.10	0.01	0.07	0.19
0.27	0.25	0.21	0.28	0.11	0.42
0.58	0.30	0.27	0.34	0.01	0.40
1.36	1.28	1.54	1.78	1.90	2.12
0.59	0.34	0.34	0.32	0.03	1.34
6.56	6.03	6.38	7.42	6.73	8.67
2.45	2.62	2.73	3.27	1.92	3.30
0.87	0.96	0.75	0.80	0.70	1.16
1.47	1.19	1.54	1.19	1.52	2.41
1.11	1.49	0.77	1.15	0.17	1.28
5.90	6.26	5.79	6.41	4.31	8.15
12.46	12.29	12.17	13.83	11.04	16.82
1.14	1.19	1.09	0.88	0.57	1.06
1.65	1.44	0.95	1.00	1.22	2.49
0.18	0.17	0.13	0.16	0.13	0.32
0.54	0.76	0.32	0.26	0.43	0.39
0.34	0.24	0.38	0.30	0.07	0.[illegible]
0.28	0.16	0.19	0.26	0.20	0.18
0.40	0.38	0.33	0.23	0.22	0.26
0.08	0.08	0.05	0.19	0.00	0.01
0.24	0.21	0.17	0.09	0.11	0.48
1.25	1.34	1.47	1.54	0.83	1.03
6.10	5.97	5.08	4.91	3.78	6.72
0.45	0.45	0.70	0.38	0.20	0.46
3.48	2.72	2.37	3.30	2.33	3.08
0.87	0.95	0.67	0.14	0.54	0.19
0.25	0.19	0.19	0.07	0.13	0.17
0.35	0.32	0.36	0.27	0.15	0.21
0.28	0.21	0.20	0.11	0.21	0.28
0.56	0.47	0.44	0.17	0.38	0.71
1.05	1.49	0.69	0.04	0.92	0.39
7.29	6.80	5.62	4.48	4.86	5.49

BALANCE SHEET

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	4.11%	6.89%	4.21%	5.83%
Receivables	30.30	27.78	32.01	30.64
Inventories	14.19	12.83	14.16	14.88
Other current assets	3.67	4.95	2.52	3.56
TOTAL CURRENT ASSETS	52.27	52.45	52.90	54.91
FIXED ASSETS				
Real estate	11.98	12.48	11.03	11.20
Less: Accumulated depreciation	3.39	2.96	3.04	2.24
	8.59	9.52	7.99	8.96
Machinery and equipment	61.87	56.28	62.23	50.31
Less: Accumulated depreciation	28.99	25.37	29.72	20.93
	32.88	30.91	32.51	29.38
Other fixed assets	5.03	3.85	5.77	5.33
Less: Accumulated depreciation	2.55	1.92	3.03	2.91
	2.48	1.93	2.74	2.42
NET FIXED ASSETS	43.95	42.36	43.24	40.76
OTHER ASSETS	3.78	5.19	3.86	4.33
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	8.98	4.36	11.01	5.70
Accounts payable	13.81	9.72	14.54	8.61
Other current liabilities	9.91	9.73	10.11	11.33
TOTAL CURRENT LIABILITIES	32.70	23.81	35.66	25.64
LONG-TERM LIABILITIES	28.90	22.64	32.29	29.70
TOTAL LIABILITIES	61.60	46.45	67.95	55.34
SHAREHOLDERS' AND PROPRIETORS' EQUITY	38.40	53.55	32.05	44.66
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.60	2.20	1.[illegible]3	2.14
QUICK RATIO	1.16	1.66	1.[illegible]9	1.56
TOTAL LIABILITIES TO EQUITY	1.60	0.87	2.12	1.24
LONG-TERM LIABILITIES TO EQUITY	0.75	0.42	1.01	0.67
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.47	0.45	0.48	0.42

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
4.51%	9.09%	2.14%	5.46%	0.43%	6.42%
29.41	26.83	27.78	22.75	19.77	22.31
14.09	11.12	15.52	12.18	15.66	9.29
5.09	6.34	4.92	5.23	5.35	0.63
53.10	53.38	50.36	45.62	41.21	38.65
12.92	13.54	12.24	9.54	16.47	15.02
3.91	3.62	3.64	2.20	2.34	2.41
9.01	9.92	8.60	7.34	14.13	12.61
59.57	56.42	68.62	70.24	60.06	62.39
27.52	25.54	33.30	37.05	20.61	22.22
32.05	30.88	35.32	33.19	39.45	40.17
4.80	2.90	2.64	2.57	4.20	2.65
2.29	1.25	1.54	1.12	0.90	0.96
2.51	1.65	1.10	1.45	3.30	1.69
43.57	42.45	45.02	41.98	56.88	54.47
3.33	4.17	4.62	12.40	1.91	6.88
100.00	100.00	100.00	100.00	100.00	100.00
6.32	3.64	10.26	3.23	1.76	3.91
13.76	11.76	11.52	7.22	12.42	7.74
10.93	8.97	6.21	7.38	2.76	9.37
31.01	24.37	27.99	17.83	16.94	21.02
22.82	17.79	27.05	11.75	42.56	50.40
53.83	42.16	55.04	29.58	59.50	71.42
46.17	57.84	44.96	70.42	40.50	28.58
100.00	100.00	100.00	100.00	100.00	100.00
1.71	2.19	1.80	2.56	2.43	1.84
1.26	1.73	1.24	1.88	1.51	1.40
1.17	0.73	1.22	0.42	1.47	2.50
0.49	0.31	0.60	0.17	1.05	1.76
0.46	0.45	0.49	0.53	0.34	0.36

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 57,961	$ 60,297	$ 52,397	$ 54,644
Average assets per factory employee (Excluding Executives)	78,638	91,596	75,845	106,154
Average net worth per employee - All employees	22,403	32,817	17,122	22,922
Average gross plant investment per factory employee (Excluding Executives)	58,470	58,153	54,611	54,767
Net worth percentage of fixed assets	103.49%	147.20%	84.49%	123.84%
EMPLOYEES				
Percent factory - All employees	81.15%	80.88%	79.75%	75.79%
Percent administrative - All employees	8.45	8.66	8.60	9.71
Percent sales - All employees	10.40	10.46	11.65	14.50
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 100,581	$ 97,106	$ 95,764	$ 90,838
Sales per factory employee	132,920	152,842	136,005	193,884
Sales less material per factory employee	74,250	90,968	77,447	112,814
Sales per administrative employee	1,392,561	1,356,635	1,270,166	1,180,984
EXCLUDING EXECUTIVES				
Sales per employee - All employees	107,457	103,969	102,690	98,345
Sales per factory employee	139,324	159,059	142,112	199,959
Sales less material per factory employee	77,887	94,935	81,075	116,913
SALES PER SALESMAN	1,740,626	1,955,566	1,287,962	1,327,059
SALES TO CURRENT ASSETS	376%	341%	384%	330%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	35.29%	34.67%	36.82%	35.82%
Factory payroll percentage of gross plant investment	65.04	57.68	70.93	57.91
Payroll per employee - All employees	$ 33,969	$ 32,442	$ 34,347	$ 31,709
Payroll per factory employee	30,340	28,388	29,960	26,147
Payroll per administrative employee	41,634	47,553	42,686	51,056
Payroll per sales employee	58,871	56,328	60,609	53,701
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 26,480	$ 24,601	$ 26,869	$ 23,922
Payroll per factory employee	24,421	22,544	24,445	21,491
Payroll per administrative employee	20,602	20,585	20,503	20,566
Payroll per sales employee	48,854	45,798	50,014	43,312
EXECUTIVE PAYROLL				
Payroll per executive - All executives	69,954	74,480	73,094	81,953
Payroll per factory executive	49,895	49,228	47,863	42,727
Payroll per administrative executive	93,877	104,242	91,222	111,861
Payroll per sales executive	81,661	79,084	85,646	81,395
RECEIVABLES				
Collection period	62.2	63.3	62.1	67.1
PROFIT				
Gross profit percentage of sales	20.01%	26.37%	20.92%	29.43%
Average gross profit per factory employee	$ 30,467	$ 50,181	$ 35,054	$ 75,991
Income before taxes percentage of sales	4.67%	11.57%	3.92%	10.45%
Average income before taxes per employee	$ 4,782	$ 11,225	$ 3,869	$ 9,537

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 61,312	$ 62,665	$ 63,937	$ 73,467	$ 98,943	$ 81,915
78,477	78,205	83,741	97,267	115,474	101,970
28,124	37,495	28,723	54,085	25,462	21,993
59,261	55,274	67,489	79,134	82,910	81,563
129.79%	169.77%	120.81%	173.24%	68.84%	58.35%
82.52%	84.15%	82.49%	84.14%	87.77%	81.02%
8.36	8.09	6.98	7.71	7.92	13.87
9.12	7.76	10.53	8.15	4.31	5.11
$ 101,605	$ 98,662	$ 116,695	$ 120,957	$ 147,124	$ 95,421
123,967	118,030	147,772	151,630	169,732	118,158
69,448	72,289	74,143	89,433	81,143	74,497
1,459,190	1,390,243	1,837,234	1,985,791	1,771,637	928,881
108,509	105,156	124,794	128,818	150,293	97,332
130,922	124,326	155,465	160,780	171,782	119,244
73,288	76,163	78,059	94,856	82,387	75,183
2,070,837	2,333,207	2,353,950	1,777,829	3,909,336	3,657,929
361%	328%	403%	416%	355%	345%
34.92%	34.20%	29.86%	31.19%	29.92%	32.89%
62.45	61.04	51.68	49.43	44.07	40.93
$ 33,237	$ 32,014	$ 34,370	$ 37,550	$ 40,293	$ 31,257
30,394	28,776	31,554	35,827	36,308	29,119
40,543	45,375	41,900	42,988	40,107	34,389
53,514	52,762	57,597	78,240	113,583	78,324
$ 25,923	$ 24,202	$ 25,954	$ 28,957	$ 32,643	$ 24,873
24,145	22,318	24,669	27,500	29,656	23,940
20,698	19,903	20,167	19,833	23,382	21,549
45,475	44,398	42,611	55,071	108,443	68,231
65,176	70,785	62,345	59,740	86,952	99,515
50,915	56,739	47,140	47,938	82,212	73,681
96,161	95,952	93,745	111,860	105,567	112,587
71,431	68,831	100,796	127,623	76,558	74,797
63.6	63.0	57.3	52.2	50.3	69.9
19.62%	24.99%	16.49%	21.06%	18.38%	21.69%
$ 25,120	$ 30,744	$ 27,435	$ 35,921	$ 27,479	$ 26,138
5.33%	12.61%	5.31%	11.36%	8.06%	6.37%
$ 5,578	$ 12,428	$ 5,933	$ 13,212	$ 7,528	$ 6,286

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES FROM $10 TO $20 MILLION	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 2.53	$ 4.44	$ 2.47	$ 3.21
Receivables	16.45	16.76	16.48	17.89
Inventories	7.84	8.01	7.56	9.20
Marketable securities	0.94	1.50	0.39	0.19
Other current assets	1.45	2.15	1.04	2.35
	29.21	32.86	27.94	32.84
Plant Investment:				
Land and building	7.31	7.72	6.84	7.19
Machinery and equipment	35.31	34.96	33.50	31.17
Other fixed assets	2.63	2.15	2.88	2.90
	45.25	44.83	43.22	41.26
Non-Current Assets	2.48	3.54	2.24	2.86
TOTAL INVESTMENT	76.94	81.23	73.40	76.96
INVESTMENT TURNOVER PER $100 OF SALES	129.97%	123.11%	136.24%	129.94%
EARNINGS				
Cost of Product	$79.99	$73.63	$79.08	$70.57
Selling Expenses	7.76	7.66	8.67	9.59
Administrative Expenses	6.32	6.72	6.76	8.13
	94.07	88.01	94.51	88.29
Income Before Interest, Other Income, and Taxes	5.93	11.99	5.49	11.71
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.71%	14.76%	7.48%	15.22%

** Sample insufficient for Profit Leaders.

SALES FROM $20 TO $40 MILLION		SALES FROM $40 TO $80 MILLION		SALES FROM $80 TO $160 MILLION**	SALES OVER $160 MILLION**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 2.89	$ 6.43	$ 1.26	$ 3.37	$ 0.30	$ 5.31
16.79	16.54	15.09	13.90	13.46	18.35
8.01	6.97	8.33	7.52	10.66	7.62
1.70	2.35	1.00	2.86	2.88	0.01
1.96	2.51	1.96	0.60	0.89	0.49
31.35	34.80	27.64	28.25	28.19	31.78
7.57	7.96	6.88	5.90	11.42	13.31
35.41	34.75	39.45	42.38	41.74	54.11
2.61	1.64	1.32	1.57	2.86	2.77
45.59	44.35	47.65	49.85	56.02	70.19
2.76	3.21	2.41	7.26	1.30	4.86
79.70	82.36	77.70	85.36	85.51	106.83
125.47%	121.42%	128.70%	117.15%	116.95%	93.61%
$80.38	$75.01	$83.51	$78.94	$81.62	$78.31
7.29	6.80	5.62	4.48	4.86	5.49
6.10	5.97	5.08	4.91	3.78	6.72
93.77	87.78	94.21	88.33	90.26	90.52
6.23	12.22	5.79	11.67	9.74	9.48
7.82%	14.84%	7.45%	13.67%	11.39%	8.87%

REPORT ON OPERATIONS - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	X	X	X	X
LESS: PAPER, OTHER CHARGEABLE MATERIALS AND OUTSIDE SERVICES	X	X	X	X
VALUE ADDED BY MANUFACTURE	100.00%	100.00%	100.00%	100.00%
FACTORY PAYROLL	44.40	39.16	47.82	41.38
FACTORY EXPENSES	20.55	17.98	24.87	22.55
TOTAL FACTORY COST OF PRODUCT	64.95	57.14	72.69	63.93
GROSS PROFIT	35.05	42.86	27.31	36.07
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	10.65	10.12	9.37	8.38
Selling expenses	14.24	13.10	7.15	6.07
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	24.89	23.22	16.52	14.45
INCOME BEFORE INTEREST EXPENSE	10.16	19.64	10.79	21.62
Interest expense	3.35	2.34	4.07	2.21
OPERATING INCOME (LOSS)	6.81	17.30	6.72	19.41
Other income	0.75	1.06	1.19	1.14
INCOME BEFORE INCOME TAXES	7.56	18.36	7.91	20.55

** Sample insufficient for Profit Leaders.

BOOK		DIRECTORY**	NO PREDOMINANT PRODUCT**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
X	X	X	X
X	X	X	X
100.00%	100.00%	100.00%	100.00%
45.02	42.93	33.50	52.21
19.46	18.63	15.04	24.59
64.48	61.56	48.54	76.80
35.52	38.44	51.46	23.20
12.82	11.67	20.13	11.85
12.43	10.40	16.10	10.35
25.25	22.07	36.23	22.20
10.27	16.37	15.23	1.00
2.54	1.47	2.38	2.46
7.73	14.90	12.85	(1.46)
1.86	2.11	2.83	1.93
9.59	17.01	15.68	0.47

SUPPORTING SCHEDULES - VALUE ADDED = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.98%	3.23%	2.91%	2.63%
Direct wages	28.45	24.21	29.47	23.98
General factory salaries and wages	4.16	3.54	5.99	6.09
Packing, shipping and delivery wages	1.70	1.63	1.17	0.66
Payroll taxes	2.69	2.23	2.85	2.93
Employee benefits	4.42	4.32	5.43	5.09
TOTAL FACTORY PAYROLL	44.40	39.16	47.82	41.38
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.42	0.38	0.55	0.56
Depreciation - other	5.49	4.87	6.89	7.07
Taxes - real estate	0.41	0.35	0.34	0.20
Taxes - other	0.33	0.24	0.27	0.18
Insurance	0.55	0.48	0.49	0.30
Building rent	1.41	1.32	0.81	0.40
Utilities - heat, light, etc.	2.28	2.06	3.08	2.52
Equipment rental	0.88	0.54	1.23	0.20
Total Fixed Expenses	11.77	10.24	13.66	11.43
Other Expenses				
Factory supplies and expense	3.41	3.01	4.88	4.43
Packing, shipping and delivery expense	1.56	1.51	1.85	2.63
Repairs and maintenance	2.60	2.06	2.57	1.80
Other factory expenses	1.21	1.16	1.91	2.26
Total Other Expenses	8.78	7.74	11.21	11.12
TOTAL FACTORY EXPENSES	20.55	17.98	24.87	22.55
ADMINISTRATIVE EXPENSES				
Salaries - executive	2.59	2.91	1.78	1.91
Salaries - office	2.55	2.27	2.35	2.32
Payroll taxes	0.32	0.27	0.29	0.32
Employee benefits	0.66	0.70	0.80	1.01
Bad debts	0.61	0.54	0.81	0.56
Office supplies and expenses	0.51	0.33	0.53	0.56
Professional fees	0.79	0.84	0.67	0.48
Taxes - business	0.11	0.07	0.07	0.06
Telephone	0.55	0.45	0.49	0.43
Other administrative expenses	1.96	1.74	1.58	0.73
TOTAL ADMINISTRATIVE EXPENSES	10.65	10.12	9.37	8.38
SELLING EXPENSES				
Salaries - executive	1.39	1.22	0.64	0.49
Salaries and commissions - salesmen	7.50	6.88	2.06	1.48
Salaries - sales office clerical	1.27	1.27	1.48	1.28
Payroll taxes	0.50	0.43	0.24	0.21
Employee benefits	0.58	0.49	0.46	0.32
Advertising	0.53	0.31	0.35	0.24
Travel and entertainment	1.18	1.06	0.82	0.65
Other selling expenses	1.29	1.44	1.10	1.40
TOTAL SELLING EXPENSES	14.24	13.10	7.15	6.07

** Sample insufficient for Profit Leaders.

BOOK		DIRECTORY**	NO PREDOMINANT PRODUCT**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
3.67%	3.64%	2.47%	3.29%
25.71	22.72	20.75	32.30
6.83	7.36	4.05	4.01
1.43	1.51	0.70	1.39
3.16	2.61	1.74	3.69
4.22	5.09	3.79	7.53
45.02	42.93	33.50	52.21
0.91	0.55	0.31	0.28
3.57	3.92	3.80	4.42
0.32	0.29	0.50	0.15
0.40	0.68	0.25	0.43
0.54	0.58	0.22	0.47
0.68	0.25	0.59	1.00
2.15	2.12	1.79	2.26
0.29	0.34	0.23	0.64
8.86	8.73	7.69	9.65
5.45	5.54	2.54	6.61
1.29	1.26	1.42	4.47
2.71	1.81	2.96	2.19
1.15	1.29	0.43	1.67
10.60	9.90	7.35	14.94
19.46	18.63	15.04	24.59
2.07	2.49	5.83	1.71
3.30	2.54	3.72	2.84
0.40	0.35	0.63	0.34
0.95	1.30	1.34	0.88
0.54	0.52	1.57	0.56
0.55	0.27	0.41	0.53
0.85	0.57	1.80	0.63
0.62	0.62	0.23	0.09
0.39	0.34	0.43	0.66
3.15	2.67	4.17	3.61
12.82	11.67	20.13	11.85
1.44	1.20	2.85	0.70
4.86	3.59	9.46	2.92
1.96	1.74	1.03	3.06
0.46	0.35	0.85	0.47
0.57	0.69	0.17	0.86
0.28	0.19	0.37	0.35
0.91	0.98	0.51	0.97
1.95	1.66	0.86	1.02
12.43	10.40	16.10	10.35

REPORT ON OPERATIONS - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	28.52	25.22	30.38	25.33
Other chargeable materials	6.05	5.64	7.04	6.59
Outside services	8.26	6.41	4.39	5.22
TOTAL MATERIALS	42.83	37.27	41.81	37.14
FACTORY PAYROLL	25.26	24.32	27.62	26.30
FACTORY EXPENSES	11.54	11.04	14.44	14.15
TOTAL FACTORY COST OF PRODUCT	79.63	72.63	83.87	77.59
GROSS PROFIT	20.37	27.37	16.13	22.41
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	6.15	6.49	5.38	5.19
Selling expenses	8.35	8.61	4.16	4.00
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	14.50	15.10	9.54	9.19
INCOME BEFORE INTEREST EXPENSE	5.87	12.27	6.59	13.22
Interest expense	1.86	1.47	2.29	1.45
OPERATING INCOME (LOSS)	4.01	10.80	4.30	11.77
Other income	0.42	0.62	0.64	0.70
INCOME (LOSS) BEFORE INCOME TAXES	4.43	11.42	4.94	12.47

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS				
Ink	2.94%	2.50%	4.14%	2.86%
Film	0.99	1.22	0.86	1.23
Plates	0.93	0.86	1.02	1.20
Other chargeable materials	1.19	1.06	1.02	1.30
TOTAL OTHER CHARGEABLE MATERIALS	6.05	5.64	7.04	6.59
OUTSIDE SERVICES				
Composition	0.39	0.26	0.18	0.42
Offset preparation	1.21	0.73	1.27	1.68
Printing	1.40	0.76	0.80	0.98
Binding	2.94	2.55	1.05	0.72
Other outside services	2.32	2.11	1.09	1.42
TOTAL OUTSIDE SERVICES	8.26	6.41	4.39	5.22

** Sample insufficient for Profit Leaders.

BOOK		DIRECTORY**	NO PREDOMINANT PRODUCT**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%
25.00	22.47	38.50	22.38
6.65	6.87	3.60	6.14
5.65	8.59	9.88	14.84
37.30	37.93	51.98	43.36
28.28	26.75	15.59	29.58
12.14	11.48	6.96	13.32
77.72	76.16	74.53	86.26
22.28	23.84	25.47	13.74
7.94	7.20	10.02	6.90
8.00	6.52	8.13	6.62
15.94	13.72	18.15	13.52
6.34	10.12	7.32	0.22
1.52	0.88	1.10	1.56
4.82	9.24	6.22	(1.34)
1.13	1.28	1.33	1.00
5.95	10.52	7.55	(0.34)

0.98%	1.38%	1.95%	3.60%
1.65	1.28	0.30	0.49
1.41	1.59	0.47	1.41
2.61	2.62	0.88	0.64
6.65	6.87	3.60	6.14
1.59	3.50	1.21	0.01
0.34	0.30	0.03	0.28
0.41	0.60	3.47	14.26
1.87	1.67	5.17	0.04
1.44	2.52	0.00	0.25
5.65	8.59	9.88	14.84

SUPPORTING SCHEDULES - SALES = 100%

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	1.70%	2.03%	1.72%	1.65%
Direct wages	16.19	15.08	16.95	15.32
General factory salaries and wages	2.37	2.15	3.41	3.79
Packing, shipping and delivery wages	0.94	0.99	0.67	0.40
Payroll taxes	1.54	1.40	1.71	1.88
Employee benefits	2.52	2.67	3.17	3.26
TOTAL FACTORY PAYROLL	25.26	24.32	27.62	26.30
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.24	0.25	0.33	0.36
Depreciation - other	3.05	2.92	4.03	4.46
Taxes - real estate	0.23	0.21	0.19	0.13
Taxes - other	0.19	0.15	0.16	0.11
Insurance	0.31	0.29	0.28	0.19
Building rent	0.81	0.82	0.46	0.29
Utilities - heat, light, etc.	1.26	1.22	1.77	1.55
Equipment rental	0.50	0.35	0.72	0.13
Total Fixed Expenses	6.59	6.21	7.94	7.22
Other Expenses				
Factory supplies and expense	1.95	1.90	2.86	2.82
Packing, shipping and delivery expense	0.86	0.96	1.07	1.63
Repairs and maintenance	1.46	1.26	1.45	1.09
Other factory expenses	0.68	0.71	1.12	1.39
Total Other Expenses	4.95	4.83	6.50	6.93
TOTAL FACTORY EXPENSES	11.54	11.04	14.44	14.15
ADMINISTRATIVE EXPENSES				
Salaries - executive	1.51	1.85	1.05	1.20
Salaries - office	1.49	1.48	1.33	1.36
Payroll taxes	0.18	0.17	0.17	0.19
Employee benefits	0.38	0.45	0.47	0.63
Bad debts	0.35	0.34	0.47	0.34
Office supplies and expenses	0.29	0.21	0.30	0.37
Professional fees	0.45	0.55	0.39	0.33
Taxes - business	0.06	0.04	0.04	0.04
Telephone	0.32	0.30	0.28	0.27
Other administrative expenses	1.12	1.10	0.88	0.46
TOTAL ADMINISTRATIVE EXPENSES	6.15	6.49	5.38	5.19
SELLING EXPENSES				
Salaries - executive	0.81	0.82	0.37	0.31
Salaries and commissions - salesmen	4.41	4.34	1.17	0.94
Salaries - sales office clerical	0.75	0.89	0.87	0.85
Payroll taxes	0.30	0.30	0.14	0.14
Employee benefits	0.35	0.33	0.27	0.22
Advertising	0.31	0.21	0.21	0.16
Travel and entertainment	0.68	0.73	0.46	0.42
Other selling expenses	0.74	0.99	0.67	0.96
TOTAL SELLING EXPENSES	8.35	8.61	4.16	4.00

** Sample insufficient for Profit Leaders.

BOOK ALL FIRMS	BOOK PROFIT LEADERS	DIRECTORY** ALL FIRMS	NO PREDOMINANT PRODUCT** ALL FIRMS
2.33%	2.30%	1.16%	1.88%
16.02	14.03	9.62	18.16
4.36	4.63	1.92	2.33
0.86	0.91	0.32	0.84
2.02	1.66	0.82	2.10
2.69	3.22	1.75	4.27
28.28	26.75	15.59	29.58
0.59	0.34	0.14	0.18
2.19	2.41	1.76	2.60
0.20	0.19	0.23	0.09
0.25	0.41	0.12	0.27
0.34	0.36	0.11	0.30
0.36	0.12	0.29	0.42
1.34	1.32	0.84	1.43
0.18	0.21	0.10	0.37
5.45	5.36	3.59	5.66
3.51	3.47	1.17	3.82
0.79	0.75	0.66	1.73
1.69	1.12	1.35	1.14
0.70	0.78	0.19	0.97
6.69	6.12	3.37	7.66
12.14	11.48	6.96	13.32
1.29	1.56	2.92	1.01
2.08	1.57	1.85	1.64
0.25	0.22	0.31	0.20
0.58	0.80	0.67	0.50
0.34	0.32	0.76	0.36
0.34	0.17	0.20	0.31
0.52	0.35	0.89	0.40
0.38	0.37	0.12	0.06
0.25	0.21	0.21	0.40
1.91	1.63	2.09	2.02
7.94	7.20	10.02	6.90
0.88	0.73	1.44	0.44
3.22	2.28	4.80	1.88
1.22	1.11	0.51	1.94
0.30	0.22	0.43	0.30
0.36	0.43	0.08	0.54
0.17	0.11	0.19	0.23
0.57	0.61	0.25	0.63
1.28	1.03	0.43	0.66
8.00	6.52	8.13	6.62

BALANCE SHEET

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	4.29%	8.06%	3.46%	5.96%
Receivables	32.23	29.70	23.89	19.86
Inventories	13.28	11.99	12.06	11.67
Other current assets	2.62	3.14	7.38	10.25
TOTAL CURRENT ASSETS	52.42	52.89	46.79	47.74
FIXED ASSETS				
Real estate	10.90	9.01	13.12	14.24
Less: Accumulated depreciation	3.08	2.25	3.83	3.22
	7.82	6.76	9.29	11.02
Machinery and equipment	62.59	59.36	72.53	62.08
Less: Accumulated depreciation	29.07	25.74	34.27	30.00
	33.52	33.62	38.26	32.08
Other fixed assets	5.53	5.82	3.38	1.59
Less: Accumulated depreciation	2.79	2.88	1.86	0.90
	2.74	2.94	1.52	0.69
NET FIXED ASSETS	44.08	43.32	49.07	43.79
OTHER ASSETS	3.50	3.79	4.14	8.47
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	9.74	5.43	9.12	4.16
Accounts payable	14.85	11.04	13.27	6.80
Other current liabilities	9.25	8.41	6.43	5.29
TOTAL CURRENT LIABILITIES	33.84	24.88	28.82	16.25
LONG-TERM LIABILITIES	28.60	25.04	32.45	23.60
TOTAL LIABILITIES	62.44	49.92	61.27	39.85
SHAREHOLDERS' AND PROPRIETORS' EQUITY	37.56	50.08	38.73	60.15
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.55	2.13	1.62	2.94
QUICK RATIO	1.16	1.64	1.21	2.22
TOTAL LIABILITIES TO EQUITY	1.66	1.00	1.58	0.66
LONG-TERM LIABILITIES TO EQUITY	0.76	0.50	0.84	0.39
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.46	0.43	0.47	0.48

** Sample insufficient for Profit Leaders.

BOOK		DIRECTORY**	NO PREDOMINANT PRODUCT**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
2.89%	4.73%	14.25%	5.87%
31.68	33.58	34.23	27.44
16.23	12.63	15.57	22.72
3.04	1.14	2.94	6.63
53.84	52.08	66.99	62.66
18.92	15.82	6.16	9.11
5.21	4.45	2.21	3.16
13.71	11.37	3.95	5.95
48.01	51.07	40.82	57.50
23.21	22.58	16.45	29.24
24.80	28.49	24.37	28.26
4.02	2.50	1.69	2.20
2.13	1.01	0.81	1.53
1.89	1.49	0.88	0.67
40.40	41.35	29.20	34.88
5.76	6.57	3.81	2.46
100.00	100.00	100.00	100.00
5.98	0.94	8.23	2.58
10.23	11.00	12.26	13.68
18.15	15.81	27.06	15.37
34.36	27.75	47.55	31.63
28.26	25.96	20.97	23.64
62.62	53.71	68.52	55.27
37.38	46.29	31.48	44.73
100.00	100.00	100.00	100.00
1.57	1.88	1.41	1.98
1.09	1.42	1.08	1.26
1.68	1.16	2.18	1.24
0.76	0.56	0.67	0.53
0.48	0.44	0.40	0.51

SIGNIFICANT FACTS

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 60,819	$ 64,682	$ 58,820	$ 62,677
Average assets per factory employee (Excluding Executives)	79,800	85,008	69,975	73,606
Average net worth per employee - All employees	23,000	32,478	23,706	40,239
Average gross plant investment per factory employee (Excluding Executives)	61,466	62,741	58,576	52,610
Net worth percentage of fixed assets	95.75%	130.24%	104.78%	172.72%
EMPLOYEES				
Percent factory - All employees	80.62%	80.79%	87.23%	89.11%
Percent administrative - All employees	8.56	8.23	7.12	6.76
Percent sales - All employees	10.82	10.98	5.65	4.13
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 107,687	$ 107,964	$ 87,579	$ 85,985
Sales per factory employee	134,790	135,748	100,809	96,968
Sales less material per factory employee	75,493	83,597	56,743	58,205
Sales per administrative employee	1,470,327	1,537,926	1,342,529	1,343,603
EXCLUDING EXECUTIVES				
Sales per employee - All employees	114,839	114,969	92,441	90,845
Sales per factory employee	141,687	143,111	104,854	101,189
Sales less material per factory employee	79,402	88,347	59,091	60,676
SALES PER SALESMAN	1,391,761	1,485,324	3,489,489	4,041,300
SALES TO CURRENT ASSETS	388%	356%	369%	321%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	35.44%	34.95%	33.46%	32.14%
Factory payroll percentage of gross plant investment	65.72	57.76	52.93	50.41
Payroll per employee - All employees	$ 36,636	$ 36,240	$ 28,421	$ 26,232
Payroll per factory employee	32,419	31,305	26,964	24,034
Payroll per administrative employee	43,515	51,667	37,926	43,556
Payroll per sales employee	66,978	69,211	44,997	43,270
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 28,748	$ 27,713	$ 22,020	$ 19,581
Payroll per factory employee	26,223	24,704	21,513	18,647
Payroll per administrative employee	20,946	21,272	20,237	21,701
Payroll per sales employee	56,538	58,707	35,114	31,182
EXECUTIVE PAYROLL				
Payroll per executive - All executives	79,855	97,646	54,341	51,777
Payroll per factory executive	55,241	63,878	49,011	38,709
Payroll per administrative executive	106,517	127,728	74,539	85,069
Payroll per sales executive	88,086	85,017	65,916	68,148
RECEIVABLES				
Collection period	64.0	66.6	56.2	51.8
PROFIT				
Gross profit percentage of sales	20.37%	27.37%	16.13%	22.41%
Average gross profit per factory employee	$ 29,122	$ 39,636	$ 16,276	$ 21,847
Income (loss) before taxes percentage of sales	4.43%	11.42%	4.94%	12.47%
Average income (loss) before taxes per employee	$ 4,878	$ 12,302	$ 4,365	$ 10,813

** Sample insufficient for Profit Leaders.

BOOK		DIRECTORY**	NO PREDOMINANT PRODUCT**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 40,319	$ 47,856	$ 49,678	$ 54,125
51,794	60,772	230,319	70,893
14,861	21,312	16,118	24,812
35,828	41,646	68,320	46,733
94.73%	118.04%	155.93%	208.96%
83.13%	83.96%	62.26%	81.60%
8.06	7.91	15.62	9.04
8.81	8.13	22.12	9.36
$ 71,540	$ 81,725	$ 120,263	$ 97,758
86,358	97,304	536,159	118,905
53,454	60,307	271,186	63,046
1,001,293	1,242,064	1,227,913	1,172,554
77,517	89,222	132,866	105,285
92,317	104,392	541,888	126,090
57,247	64,805	273,881	66,853
1,890,535	2,017,747	1,769,955	1,506,735
343%	345%	384%	300%
38.46%	35.66%	28.61%	38.05%
75.25	70.90	101.96	80.97
$ 26,485	$ 28,859	$ 34,786	$ 33,313
23,368	25,784	27,643	32,366
40,637	50,193	42,089	32,815
46,700	47,060	42,162	34,112
$ 20,403	$ 21,480	$ 25,323	$ 25,132
18,624	20,174	23,416	24,895
20,624	19,452	19,488	19,261
37,137	36,675	33,540	26,650
47,625	45,294	69,455	50,098
31,146	33,514	22,677	38,809
68,295	73,773	92,325	60,129
77,230	77,210	78,126	61,202
67.7	72.9	55.2	59.5
22.28%	23.84%	25.47%	13.74%
$ 21,147	$ 25,075	$ 231,027	$ 15,982
5.95%	10.52%	7.55%	(0.34)%
$ 4,779	$ 8,803	$ 9,146	$ (557)

RETURN ON INVESTMENT - PER $100 OF SALES

	COMMERCIAL AND ADVERTISING		MAGAZINE AND PERIODICAL	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 2.75	$ 5.55	$ 2.21	$ 3.95
Receivables	17.05	17.83	14.71	13.75
Inventories	7.08	7.08	7.73	8.43
Marketable securities	0.82	0.67	2.20	5.14
Other current assets	0.79	1.21	3.20	3.18
	28.49	32.34	30.05	34.45
Plant Investment:				
Land and building	6.57	5.29	8.50	9.68
Machinery and equipment	34.35	35.06	47.15	43.45
Other fixed assets	2.83	3.26	2.05	0.99
	43.75	43.61	57.70	54.12
Non-Current Assets	2.31	2.29	3.06	6.56
TOTAL INVESTMENT	74.55	78.24	90.81	95.13
INVESTMENT TURNOVER PER $100 OF SALES	134.14%	127.81%	110.12%	105.12%
EARNINGS				
Cost of Product	$79.63	$72.63	$83.87	$77.59
Selling Expenses	8.35	8.61	4.16	4.00
Administrative Expenses	6.15	6.49	5.38	5.19
	94.13	87.73	93.41	86.78
Income Before Interest, Other Income, and Taxes	5.87	12.27	6.59	13.22
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.87%	15.68%	7.26%	13.90%

** Sample insufficient for Profit Leaders.

BOOK ALL FIRMS	BOOK PROFIT LEADERS	DIRECTORY** ALL FIRMS	NO PREDOMINANT PRODUCT** ALL FIRMS
$ 1.68	$ 2.85	$ 5.84	$ 3.44
17.31	18.68	14.24	15.74
9.03	7.12	6.30	12.32
0.02	0.00	0.00	1.52
1.75	0.71	1.11	2.37
29.79	29.36	27.49	35.39
10.66	9.03	2.66	6.18
26.78	30.45	17.09	34.40
2.13	1.38	0.72	1.56
39.57	40.86	20.47	42.14
3.71	4.64	1.50	1.68
73.07	74.86	49.46	79.21
136.86%	133.58%	202.18%	126.25%
$77.72	$76.16	$74.53	$86.26
8.00	6.52	8.13	6.62
7.94	7.20	10.02	6.90
93.66	89.88	92.68	99.78
6.34	10.12	7.32	0.22
8.68%	13.52%	14.80%	0.28%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING**		
		TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	145	$ 17,638,000	$ 28,410,000	$ 1,487,000
TOTAL - PROFIT LEADERS*	35	20,719,000	32,502,000	3,806,000
BY SIZE OF FIRM				
ALL FIRMS				
$10,000,000-$20,000,000	74	7,904,000	14,371,000	548,000
$20,000,000-$40,000,000	52	16,739,000	27,838,000	1,414,000
$40,000,000-$80,000,000	14	28,455,000	51,120,000	2,618,000
$80,000,000-$160,000,000	2	86,140,000	125,873,000	9,791,000
OVER $160,000,000	3	177,176,000	213,675,000	15,134,000
PROFIT LEADERS				
$10,000,000-$20,000,000	15	8,547,000	14,087,000	1,472,000
$20,000,000-$40,000,000	15	16,262,000	25,560,000	3,210,000
$40,000,000-$80,000,000	3	25,832,000	42,609,000	4,877,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Commercial and Advertising	93	14,060,000	23,962,000	1,116,000
Magazine and Periodical	22	38,544,000	53,253,000	3,649,000
Book	13	10,214,000	17,979,000	1,090,000
Directory	3	10,989,000	25,970,000	1,820,000
No Predominant Product	5	15,519,000	27,337,000	(28,000)
PROFIT LEADERS				
Commercial and Advertising	17	14,410,000	23,719,000	2,743,000
Magazine and Periodical	8	47,155,000	69,710,000	8,389,000
Book	6	10,573,000	18,910,000	1,910,000

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See explanatory note on page 35.

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

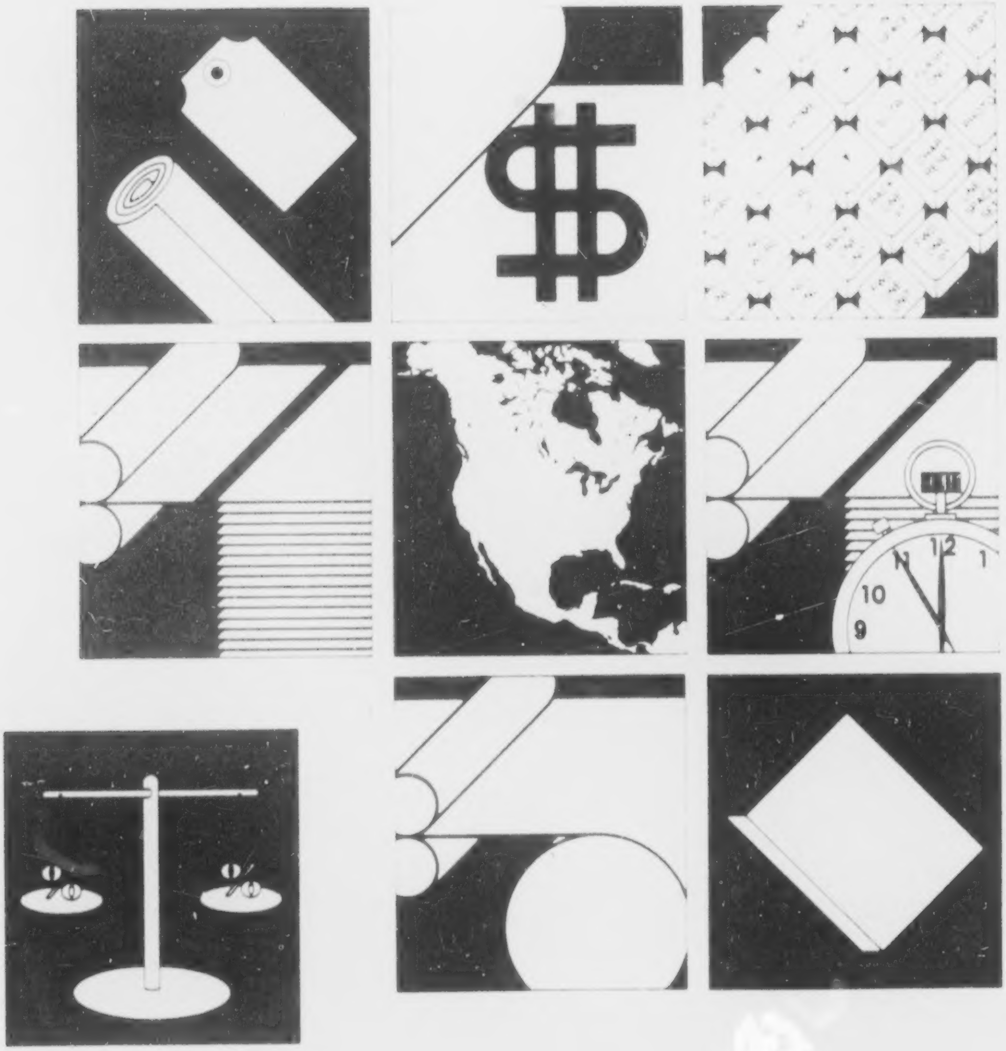
The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

A8740 - 1.11 U
10/87

PIA
1887–1987

1987 Financial Ratio Study



Volume XI

Typographers

1987
FINANCIAL
RATIO STUDY

Volume XI: Typographers

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume,* and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset,* respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 24 Typographers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales to $500,000, sales from $500,000 to $1,500,000, etc.; and by market - for example, Printers and Lithographers, Advertising Agencies, etc. Readers can compare their firm's operations with other firms having the same sales volume or market in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

CHAPTER 1 - BY SIZE OF FIRM....................................... 4-13
  Report on Operations - Sales = 100%............................. 4- 5
  Supporting Schedules - Sales = 100%............................. 4- 7
  Balance Sheet... 8- 9
  Significant Facts... 10-11
  Return on Investment - Per $100 of Sales........................ 12-13

CHAPTER 2 - BY MARKET... 14-23
  Report on Operations - Sales = 100%............................. 14-15
  Supporting Schedules - Sales = 100%............................. 14-17
  Balance Sheet... 18-19
  Significant Facts... 20-21
  Return on Investment - Per $100 of Sales........................ 22-23

ABSOLUTE DATA... 24

The National Composition Association (NCA), founded in 1964, is a National Affiliate of PIA. With over 700 active members and subscribers, NCA is the world's leading association for the computerized composition industry. Through its publications program and its slate of educational conferences in cities throughout North America, NCA provides extensive current information on technology and equipment, business management and operations, and typography and aesthetics.

The NCA publications program issues frequent new monographs and studies, a monthly newsletter, and the NCA Reports looseleaf binder of supplementals. Included among NCA's many national educational conferences is the annual convention, held in conjunction with Type-X, the world's largest annual exhibition of composition equipment and software. Like all NCA conferences, the annual convention offers a large number of information-packed seminars and briefings by leading figures and authorities from the industry.

NCA also sponsors the annual Typographic Excellence Awards competition to recognize production excellence and high standards in typography. In addition, the association sponsors a number of other programs, such as the Benchmark Reports for increased production efficiency, a technical inquiry service, an electronic bulletin board, and software.

NCA is governed by its own Board of Directors and is a self-supporting contributor to the efforts of the PIA federation. We are pleased to endorse the PIA Ratios Reports and encourage your participation in this vital program.

Tina H. Allman
President
National Composition Association
(703) 841-8165

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING	
	ALL FIRMS	PROFIT LEADERS*
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%
FACTORY COST OF PRODUCT		
MATERIALS		
Paper	0.52	1.40
Other chargeable materials	4.43	4.50
Outside services	5.60	3.86
TOTAL MATERIALS	10.55	9.76
FACTORY PAYROLL	40.79	39.33
FACTORY EXPENSES	17.84	15.81
TOTAL FACTORY COST OF PRODUCT	69.18	64.90
GROSS PROFIT	30.82	35.10
ADMINISTRATIVE AND SELLING EXPENSES		
Administrative expenses	16.03	10.73
Selling expenses	10.54	11.19
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	26.57	21.92
INCOME BEFORE INTEREST EXPENSE	4.25	13.18
Interest expense	1.51	1.39
OPERATING INCOME (LOSS)	2.74	11.79
Other income (expense)	(0.12)	0.46
INCOME (LOSS) BEFORE INCOME TAXES	2.62	12.25

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS		
Ink	0.00%	0.00%
Film	2.52	3.77
Plates	0.27	0.00
Other chargeable materials	1.64	0.73
TOTAL OTHER CHARGEABLE MATERIALS	4.43	4.50
OUTSIDE SERVICES		
Composition	0.57	1.79
Offset preparation	0.05	0.00
Printing	3.16	0.00
Binding	0.15	0.60
Other outside services	1.67	1.47
TOTAL OUTSIDE SERVICES	5.60	3.86

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Sample insufficient for Profit Leaders.

SALES TO $500,000**	SALES FROM $500,000-$1,500,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%
0.29	0.00	0.73	0.52
3.65	4.71	5.79	8.99
8.39	3.69	4.09	4.40
12.33	8.40	10.61	13.91
39.08	39.42	44.08	38.59
19.36	18.91	15.04	13.80
70.77	66.73	69.73	66.30
29.23	33.27	30.27	33.70
17.26	20.21	10.22	9.07
8.36	12.28	12.06	11.30
25.62	32.49	22.28	20.37
3.61	0.78	7.99	13.33
1.67	1.95	1.02	0.66
1.94	(1.17)	6.97	12.67
0.12	(0.60)	(0.06)	1.66
2.06	(1.77)	6.91	14.33

0.00%	0.00%	0.00%	0.00%
2.61	1.53	4.07	7.54
0.00	0.00	0.70	0.00
1.04	3.18	1.02	1.45
3.65	4.71	5.79	8.99
0.35	0.03	1.03	1.89
0.00	0.00	0.15	0.00
5.62	2.17	1.63	0.00
0.00	0.00	0.17	0.00
2.42	1.49	1.11	2.51
8.39	3.69	4.09	4.40

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING	
	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL		
Salaries - executive	5.87%	2.39%
Direct wages	23.95	26.58
General factory salaries and wages	3.27	1.01
Packing, shipping and delivery wages	1.31	0.61
Payroll taxes	3.31	4.62
Employee benefits	3.08	4.12
TOTAL FACTORY PAYROLL	40.79	39.33
FACTORY EXPENSES		
Fixed Expenses		
Depreciation - real estate	0.08	0.18
Depreciation - other	3.61	2.41
Taxes - real estate	0.02	0.04
Taxes - other	0.14	0.20
Insurance	0.78	0.62
Building rent	3.10	2.28
Utilities - heat, light, etc.	0.90	0.67
Equipment rental	3.18	1.75
Total Fixed Expenses	11.81	8.15
Other Expenses		
Factory supplies and expense	2.11	3.16
Packing, shipping and delivery expense	1.59	1.42
Repairs and maintenance	1.84	2.56
Other factory expenses	0.49	0.52
Total Other Expenses	6.03	7.66
TOTAL FACTORY EXPENSES	17.84	15.81
ADMINISTRATIVE EXPENSES		
Salaries - executive	4.94	2.52
Salaries - office	3.27	2.32
Payroll taxes	0.76	0.64
Employee benefits	0.90	1.21
Bad debts	0.56	0.08
Office supplies and expenses	1.08	1.64
Professional fees	1.00	0.34
Taxes - business	0.66	0.25
Telephone	0.83	1.00
Other administrative expenses	2.03	0.73
TOTAL ADMINISTRATIVE EXPENSES	16.03	10.73
SELLING EXPENSES		
Salaries - executive	2.19	1.13
Salaries and commissions - salesmen	3.64	2.77
Salaries - sales office clerical	0.57	2.06
Payroll taxes	0.45	0.45
Employee benefits	0.53	0.72
Advertising	0.94	0.79
Travel and entertainment	1.55	3.03
Other selling expenses	0.67	0.24
TOTAL SELLING EXPENSES	10.54	11.19

** Sample insufficient for Profit Leaders.

SALES TO $500,000**	SALES FROM $500,000-$1,500,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
8.61%	4.58%	4.18%	3.68%
21.38	21.00	28.76	23.64
1.63	7.45	1.68	2.03
2.38	0.86	0.42	0.19
3.72	3.03	3.16	2.90
1.36	2.50	5.88	6.15
39.08	39.42	44.08	38.59
0.00	0.01	0.26	0.37
3.61	3.65	3.55	3.09
0.00	0.00	0.05	0.09
0.16	0.10	0.15	0.27
1.11	0.64	0.50	0.57
4.29	3.04	1.73	1.04
0.76	0.94	1.14	1.15
3.36	4.81	1.14	0.59
13.29	13.19	8.52	7.17
2.10	2.23	1.94	1.23
1.58	1.14	2.23	2.49
2.04	1.71	1.78	1.87
0.35	0.64	0.57	1.04
6.07	5.72	6.52	6.63
19.36	18.91	15.04	13.80
5.13	7.03	2.90	2.42
3.12	4.26	2.19	1.42
1.02	0.78	0.31	0.35
0.46	1.28	1.03	1.78
0.74	0.79	0.16	0.00
1.40	1.13	0.44	0.73
1.31	0.75	0.89	0.24
1.18	0.68	0.01	0.02
0.95	0.77	0.70	1.03
1.95	2.74	1.59	1.08
17.26	20.21	10.22	9.07
2.47	2.74	1.23	0.00
1.93	4.23	5.17	3.57
0.17	0.00	1.74	4.12
0.44	0.43	0.55	0.63
0.19	0.43	1.15	1.45
1.03	1.16	0.69	0.24
1.51	2.31	1.00	0.81
0.62	0.98	0.53	0.48
8.36	12.28	12.06	11.30

BALANCE SHEET

	ALL FIRMS REPORTING	
	ALL FIRMS	PROFIT LEADERS
ASSETS		
CURRENT ASSETS		
Cash	8.69%	15.61%
Receivables	35.63	31.03
Inventories	6.65	11.86
Other current assets	5.69	0.36
TOTAL CURRENT ASSETS	56.66	58.86
FIXED ASSETS		
Real estate	3.23	5.68
Less: Accumulated depreciation	0.79	1.71
	2.44	3.97
Machinery and equipment	69.74	51.45
Less: Accumulated depreciation	39.03	20.88
	30.71	30.57
Other fixed assets	7.36	6.74
Less: Accumulated depreciation	3.25	3.13
	4.11	3.61
NET FIXED ASSETS	37.26	38.15
OTHER ASSETS	6.08	2.99
TOTAL ASSETS	100.00	100.00
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Notes payable	7.74	4.84
Accounts payable	13.77	8.88
Other current liabilities	9.65	13.18
TOTAL CURRENT LIABILITIES	31.16	26.90
LONG-TERM LIABILITIES	33.68	22.50
TOTAL LIABILITIES	64.84	49.40
SHAREHOLDERS' AND PROPRIETORS' EQUITY	35.16	50.60
TOTAL LIABILITIES AND EQUITY	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.82	2.19
QUICK RATIO	1.60	1.75
TOTAL LIABILITIES TO EQUITY	1.84	0.98
LONG-TERM LIABILITIES TO EQUITY	0.96	0.44
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.56	0.41

** Sample insufficient for Profit Leaders.

SALES TO $500,000**	SALES FROM $500,000-$1,500,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
9.49%	6.34%	5.96%	9.71%
29.99	44.78	35.50	41.60
3.12	3.88	13.95	20.38
7.83	3.18	6.12	0.24
50.43	58.18	61.53	71.93
0.00	1.57	9.50	11.36
0.00	0.90	1.80	3.41
0.00	0.67	7.70	7.95
81.20	81.89	46.93	43.08
43.85	47.23	28.89	28.49
37.35	34.66	18.04	14.59
5.96	5.86	11.74	11.63
2.06	3.17	5.34	6.26
3.90	2.69	6.40	5.37
41.25	38.02	32.14	27.91
8.32	3.80	6.33	0.16
100.00	100.00	100.00	100.00
4.87	10.79	7.17	1.50
13.42	22.33	5.13	4.13
6.48	8.98	14.76	22.84
24.77	42.10	27.06	28.47
52.08	28.92	18.21	9.60
76.85	71.02	45.27	38.07
23.15	28.98	54.73	61.93
100.00	100.00	100.00	100.00
2.04	1.38	2.27	2.53
1.91	1.29	1.76	1.81
3.32	2.45	0.83	0.61
2.25	1.00	0.33	0.16
0.54	0.58	0.62	0.66

SIGNIFICANT FACTS

	ALL FIRMS REPORTING	
	ALL FIRMS	PROFIT LEADERS
INVESTMENT		
Average assets per employee - All employees	$ 19,566	$ 21,565
Average assets per factory employee (Excluding Executives)	29,725	28,557
Average net worth per employee - All employees	8,036	11,484
Average gross plant investment per factory employee (Excluding Executives)	21,301	17,637
Net worth percentage of fixed assets	100.10%	165.18%
EMPLOYEES		
Percent factory - All employees	74.84%	81.66%
Percent administrative - All employees	14.89	7.99
Percent sales - All employees	10.27	10.35
SALES - VALUE OF PRODUCT PRODUCED		
INCLUDING EXECUTIVES		
Sales per employee - All employees	$ 44,185	$ 44,423
Sales per factory employee	61,214	55,361
Sales less material per factory employee	54,322	49,647
Sales per administrative employee	374,816	578,213
EXCLUDING EXECUTIVES		
Sales per employee - All employees	55,194	48,743
Sales per factory employee	69,889	58,808
Sales less material per factory employee	61,974	52,656
SALES PER SALESMAN	642,585	1,696,162
SALES TO CURRENT ASSETS	537%	475%
PAYROLL - INCLUDING TAXES AND BENEFITS		
INCLUDING EXECUTIVES		
Total payroll percentage of sales	58.04%	53.15%
Factory payroll percentage of gross plant investment	152.55	135.78
Payroll per employee - All employees	$ 25,478	$ 23,718
Payroll per factory employee	23,764	21,588
Payroll per administrative employee	32,795	36,660
Payroll per sales employee	30,025	31,177
PAYROLL - EXCLUDING TAXES AND BENEFITS		
EXCLUDING EXECUTIVES		
Payroll per employee - All employees	$ 19,083	$ 17,298
Payroll per factory employee	18,750	16,372
Payroll per administrative employee	17,524	20,232
Payroll per sales employee	19,111	18,965
EXECUTIVE PAYROLL		
Payroll per executive - All executives	38,560	31,171
Payroll per factory executive	29,005	22,279
Payroll per administrative executive	44,355	44,732
Payroll per sales executive	25,550	15,261
RECEIVABLES		
Collection period	54.5	58.5
PROFIT		
Gross profit percentage of sales	30.82%	35.10%
Average gross profit per factory employee	$ 22,250	$ 20,635
Income (loss) before taxes percentage of sales	2.62%	12.25%
Average income (loss) before taxes per employee	$ 1,250	$ 5,599

** Sample insufficient for Profit Leaders.

SALES TO $500,000**	SALES FROM $500,000-$1,500,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 13,837	$ 19,017	$ 26,994	$ 24,547
21,880	30,893	38,472	33,783
4,668	5,663	14,266	15,223
17,249	22,461	26,576	22,444
58.99%	53.15%	192.06%	230.39%
74.06%	72.17%	78.20%	79.66%
17.39	17.64	9.42	6.99
8.55	10.19	12.38	13.35
$ 38,404	$ 43,681	$ 52,007	$ 48,337
54,822	63,305	67,757	61,584
46,821	57,860	60,608	53,229
211,742	325,719	630,899	684,863
53,000	55,193	58,646	52,811
65,164	73,183	74,003	67,356
55,589	66,713	66,425	58,225
38,527	198,991	1,270,758	2,406,488
760%	489%	332%	269%
54.00%	60.59%	60.35%	54.33%
187.48	108.32	144.47	111.89
$ 20,447	$ 26,145	$ 31,044	$ 26,008
19,776	23,368	29,107	23,222
19,447	40,970	40,210	41,266
20,749	30,245	42,490	35,189
$ 15,234	$ 19,419	$ 23,215	$ 18,127
15,331	19,317	22,225	16,934
10,974	21,501	18,555	13,259
7,299	19,810	33,405	27,694
25,737	43,926	50,864	35,398
20,760	28,416	39,397	27,269
21,715	53,394	67,256	65,385
14,314	30,394	33,455	0
36.8	64.2	68.9	81.4
29.23%	33.27%	30.27%	33.70%
$ 19,566	$ 25,062	$ 23,309	$ 23,405
2.06%	(1.77)%	6.91%	14.33%
$ 852	$ (1,064)	$ 3,716	$ 7,156

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING	
	ALL FIRMS	PROFIT LEADERS
INVESTMENT		
Current Assets:		
Cash	$ 3.47	$ 7.90
Receivables	14.60	15.74
Inventories	3.11	6.12
Marketable securities	1.11	0.00
Other current assets	1.56	0.18
	23.85	29.94
Plant Investment:		
Land and building	1.92	3.65
Machinery and equipment	28.03	23.90
Other fixed assets	3.39	3.22
	33.34	30.77
Non-Current Assets	2.84	1.18
TOTAL INVESTMENT	60.03	61.89
INVESTMENT TURNOVER PER $100 OF SALES	166.58%	161.58%
EARNINGS		
Cost of Product	$69.18	$64.90
Selling Expenses	10.54	11.19
Administrative Expenses	16.03	10.73
	95.75	86.82
Income Before Interest, Other Income (Expense), and Taxes	4.25	13.18
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.08%	21.30%

** Sample insufficient for Profit Leaders.

SALES TO $500,000**	SALES FROM $500,000-$1,500,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 3.09	$ 2.14	$ 3.09	$ 5.16
9.93	17.26	18.33	22.06
1.26	1.24	7.30	10.54
2.80	0.21	0.00	0.00
0.74	1.09	3.24	0.12
17.82	21.94	31.96	37.88
0.00	0.51	6.07	7.30
24.14	37.34	24.71	21.83
2.58	2.18	6.13	5.70
26.72	40.03	36.91	34.83
3.43	2.14	3.17	0.07
47.97	64.11	72.04	72.78
208.46%	155.98%	138.81%	137.40%
$70.77	$66.73	$69.73	$66.30
8.36	12.28	12.06	11.30
17.26	20.21	10.22	9.07
96.39	99.22	92.01	86.67
3.61	0.78	7.99	13.33
7.53%	1.22%	11.09%	18.32%

REPORT ON OPERATIONS - SALES = 100%

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	0.00	0.59	2.30
Other chargeable materials	2.84	3.19	0.00
Outside services	5.47	4.17	3.32
TOTAL MATERIALS	8.31	7.95	5.62
FACTORY PAYROLL	52.23	44.44	40.08
FACTORY EXPENSES	13.96	18.71	17.81
TOTAL FACTORY COST OF PRODUCT	74.50	71.10	63.51
GROSS PROFIT	25.50	28.90	36.49
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	12.45	16.37	12.39
Selling expenses	7.10	9.46	11.08
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	19.55	25.83	23.47
INCOME (LOSS) BEFORE INTEREST EXPENSE	5.95	3.07	13.02
Interest expense	0.89	1.77	2.11
OPERATING INCOME (LOSS)	5.06	1.30	10.91
Other income (expense)	0.22	(0.37)	(0.74)
INCOME (LOSS) BEFORE INCOME TAXES	5.28	0.93	10.17

SUPPORTING SCHEDULES - SALES = 100%

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS			
Ink	0.00%	0.00%	0.00%
Film	2.84	2.08	0.00
Plates	0.00	0.00	0.00
Other chargeable materials	0.00	1.11	0.00
TOTAL OTHER CHARGEABLE MATERIALS	2.84	3.19	0.00
OUTSIDE SERVICES			
Composition	5.47	0.47	1.78
Offset preparation	0.00	0.00	0.00
Printing	0.00	2.62	0.00
Binding	0.00	0.20	1.54
Other outside services	0.00	0.88	0.00
TOTAL OUTSIDE SERVICES	5.47	4.17	3.32

** Sample insufficient for Profit Leaders.

PUBLISHERS**	BOOKS**	DIRECT BUYERS**	OTHERS**
ALL FIRMS	ALL FIRMS	ALL FIRMS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%
1.08	0.52	0.00	1.33
6.76	6.97	4.93	6.78
2.41	2.87	12.17	3.09
10.25	10.36	17.10	11.20
49.57	37.27	30.76	29.11
13.63	12.92	19.29	22.43
73.45	60.55	67.15	62.74
26.55	39.45	32.85	37.26
8.67	15.07	13.02	33.55
11.48	10.61	13.76	10.79
20.15	25.68	26.78	44.34
6.40	13.77	6.07	(7.08)
0.72	0.71	2.13	0.80
5.68	13.06	3.94	(7.88)
1.24	(2.24)	0.48	0.17
6.92	10.82	4.42	(7.71)

0.00%	0.00%	0.00%	0.00%
5.51	3.13	1.72	3.34
0.00	0.00	1.88	0.00
1.25	3.84	1.33	3.44
6.76	6.97	4.93	6.78
2.30	0.00	0.29	0.25
0.00	0.00	0.21	0.00
0.10	0.00	8.03	0.65
0.00	0.00	0.24	0.00
0.01	2.87	3.40	2.19
2.41	2.87	12.17	3.09

SUPPORTING SCHEDULES - SALES = 100%

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL			
Salaries - executive	19.96%	5.43%	1.10%
Direct wages	25.85	25.01	29.49
General factory salaries and wages	0.17	5.30	0.00
Packing, shipping and delivery wages	0.00	2.34	1.04
Payroll taxes	2.55	3.94	6.35
Employee benefits	3.70	2.42	2.10
TOTAL FACTORY PAYROLL	52.23	44.44	40.08
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.43	0.01	0.00
Depreciation - other	4.88	3.84	1.71
Taxes - real estate	0.10	0.00	0.00
Taxes - other	0.17	0.14	0.12
Insurance	0.53	0.84	0.67
Building rent	2.22	3.04	3.52
Utilities - heat, light, etc.	1.09	0.97	0.19
Equipment rental	0.04	3.49	2.91
Total Fixed Expenses	9.46	12.33	9.12
Other Expenses			
Factory supplies and expense	2.45	2.96	5.09
Packing, shipping and delivery expense	0.01	1.24	0.36
Repairs and maintenance	1.67	1.73	3.24
Other factory expenses	0.37	0.45	0.00
Total Other Expenses	4.50	6.38	8.69
TOTAL FACTORY EXPENSES	13.96	18.71	17.81
ADMINISTRATIVE EXPENSES			
Salaries - executive	1.67	5.44	2.63
Salaries - office	0.40	3.83	3.22
Payroll taxes	0.11	1.11	0.92
Employee benefits	0.68	0.81	0.64
Bad debts	2.33	0.52	0.15
Office supplies and expenses	0.31	1.47	2.55
Professional fees	1.13	1.15	0.45
Taxes - business	0.02	0.25	0.48
Telephone	0.80	0.83	0.97
Other administrative expenses	5.00	0.96	0.38
TOTAL ADMINISTRATIVE EXPENSES	12.45	16.37	12.39
SELLING EXPENSES			
Salaries - executive	1.44	2.22	2.26
Salaries and commissions - salesmen	1.25	3.18	1.95
Salaries - sales office clerical	1.21	0.00	0.00
Payroll taxes	0.30	0.40	0.27
Employee benefits	1.04	0.22	0.00
Advertising	0.27	0.95	1.34
Travel and entertainment	0.75	2.01	5.26
Other selling expenses	0.84	0.48	0.00
TOTAL SELLING EXPENSES	7.10	9.46	11.08

** Sample insufficient for Profit Leaders.

PUBLISHERS**	BOOKS**	DIRECT BUYERS**	OTHERS**
ALL FIRMS	ALL FIRMS	ALL FIRMS	ALL FIRMS
3.70%	3.87%	4.32%	2.29%
33.36	25.83	18.25	19.17
1.98	1.15	1.73	2.50
0.50	0.19	0.85	0.00
3.82	3.09	2.57	2.18
6.21	3.14	3.04	2.97
49.57	37.27	30.76	29.11
0.49	0.00	0.00	0.00
3.60	2.61	4.14	0.61
0.09	0.00	0.00	0.00
0.12	0.18	0.06	0.31
0.50	0.76	0.57	1.54
1.40	2.33	3.51	5.79
1.13	1.17	0.58	0.68
0.72	1.24	2.78	10.01
8.05	8.29	11.64	18.94
1.26	1.03	1.80	0.00
1.71	0.91	3.52	0.79
1.81	2.07	1.70	2.70
0.80	0.62	0.63	0.00
5.58	4.63	7.65	3.49
13.63	12.92	19.29	22.43
2.51	6.74	3.69	9.30
1.86	2.65	3.22	5.17
0.36	0.44	0.42	1.10
1.13	1.41	0.23	2.54
0.00	0.00	0.29	0.77
0.39	0.66	0.80	1.45
0.64	0.78	1.11	0.34
0.00	0.15	0.16	6.00
1.09	0.76	0.62	1.22
0.69	1.48	2.48	5.66
8.67	15.07	13.02	33.55
1.18	0.00	2.77	4.57
4.14	2.57	6.57	1.61
2.61	2.24	0.30	0.00
0.57	0.44	0.59	0.41
1.29	0.92	0.32	1.11
0.30	0.80	1.61	0.72
0.92	1.67	1.19	1.25
0.47	1.97	0.41	1.12
11.48	10.61	13.76	10.79

BALANCE SHEET

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
ASSETS			
CURRENT ASSETS			
Cash	0.87%	9.28%	21.52%
Receivables	31.24	29.49	20.43
Inventories	6.71	5.46	3.35
Other current assets	0.28	8.30	0.49
TOTAL CURRENT ASSETS	39.10	52.53	45.79
FIXED ASSETS			
Real estate	21.87	1.00	0.00
Less: Accumulated depreciation	2.89	0.57	0.00
	18.98	0.43	0.00
Machinery and equipment	72.72	66.02	59.83
Less: Accumulated depreciation	39.51	30.49	13.28
	33.21	35.53	46.55
Other fixed assets	5.51	4.09	1.85
Less: Accumulated depreciation	2.13	1.42	0.00
	3.38	2.67	1.85
NET FIXED ASSETS	55.57	38.63	48.40
OTHER ASSETS	5.33	8.84	5.81
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY (DEFICIENCY)			
CURRENT LIABILITIES			
Notes payable	7.21	12.21	8.17
Accounts payable	12.05	10.63	13.64
Other current liabilities	11.41	5.25	3.51
TOTAL CURRENT LIABILITIES	30.67	28.09	25.32
LONG-TERM LIABILITIES	38.43	33.62	35.40
TOTAL LIABILITIES	69.10	61.71	60.72
SHAREHOLDERS' AND PROPRIETORS' EQUITY (DEFICIENCY)	30.90	38.29	39.28
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.27	1.87	1.81
QUICK RATIO	1.06	1.68	1.68
TOTAL LIABILITIES TO EQUITY (DEFICIENCY)	2.24	1.61	1.55
LONG-TERM LIABILITIES TO EQUITY (DEFICIENCY)	1.24	0.88	0.90
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.54	0.46	0.22

** Sample insufficient for Profit Leaders.

PUBLISHERS**	BOOKS**	DIRECT BUYERS**	OTHERS**
ALL FIRMS	ALL FIRMS	ALL FIRMS	ALL FIRMS
11.06%	9.80%	8.86%	9.40%
39.81	45.34	29.01	76.43
14.18	16.60	2.59	5.82
1.98	1.31	7.46	0.40
67.03	73.05	47.92	92.05
11.37	0.00	0.00	0.00
3.41	0.00	0.00	0.00
7.96	0.00	0.00	0.00
49.79	94.80	79.44	57.83
32.69	74.74	41.35	50.36
17.10	20.06	38.09	7.47
13.35	18.55	11.20	0.48
7.47	13.38	3.31	0.00
5.88	5.17	7.89	0.48
30.94	25.23	45.98	7.95
2.03	1.72	6.10	0.00
100.00	100.00	100.00	100.00
2.46	5.42	2.98	3.24
2.04	7.99	9.99	59.72
19.09	25.65	8.34	9.88
23.59	39.06	21.31	72.84
9.96	5.19	52.31	34.92
33.55	44.25	73.62	107.76
66.45	55.75	26.38	(7.76)
100.00	100.00	100.00	100.00
2.84	1.87	2.25	1.26
2.24	1.45	2.13	1.18
0.50	0.79	2.79	(13.89)
0.15	0.09	1.98	(4.50)
0.66	0.79	0.52	0.87

SIGNIFICANT FACTS

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Average assets per employee - All employees	$ 17,238	$ 17,844	$ 18,582
Average assets per factory employee (Excluding Executives)	27,827	26,363	23,331
Average net worth per employee - All employees	6,990	7,326	7,746
Average gross plant investment per factory employee (Excluding Executives)	29,544	18,621	12,831
Net worth (deficiency) percentage of fixed assets	53.08%	131.64%	99.97%
EMPLOYEES			
Percent factory - All employees	90.45%	74.35%	83.66%
Percent administrative - All employees	2.03	17.20	8.99
Percent sales - All employees	7.52	8.45	7.35
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 36,882	$ 40,565	$ 40,508
Sales per factory employee	41,999	54,913	49,138
Sales less material per factory employee	39,234	50,425	46,066
Sales per administrative employee	532,992	287,617	471,563
EXCLUDING EXECUTIVES			
Sales per employee - All employees	57,904	49,695	44,675
Sales per factory employee	63,331	60,745	50,259
Sales less material per factory employee	58,224	55,858	47,086
SALES PER SALESMAN	1,599,000	223,642	275,510
SALES TO CURRENT ASSETS	723%	504%	681%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	60.33%	61.67%	51.97%
Factory payroll percentage of gross plant investment	171.95	202.10	159.66
Payroll per employee - All employees	$ 22,632	$ 24,941	$ 21,427
Payroll per factory employee	21,690	24,437	19,953
Payroll per administrative employee	30,468	26,574	32,053
Payroll per sales employee	15,070	25,030	27,165
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 16,450	$ 19,506	$ 16,469
Payroll per factory employee	16,641	19,915	15,809
Payroll per administrative employee	10,628	16,343	27,205
Payroll per sales employee	9,371	12,180	10,236
EXECUTIVE PAYROLL			
Payroll per executive - All executives	23,601	33,725	26,945
Payroll per factory executive	20,197	27,613	17,290
Payroll per administrative executive	29,591	32,742	24,080
Payroll per sales executive	16,937	28,096	30,521
RECEIVABLES			
Collection period	39.5	44.9	35.6
PROFIT			
Gross profit percentage of sales	25.50%	28.90%	36.49%
Average gross profit per factory employee	$ 16,272	$ 17,200	$ 17,865
Income (loss) before taxes percentage of sales	5.28%	0.93%	10.17%
Average income (loss) before taxes per employee	$ 1,943	$ 376	$ 4,041

** Sample insufficient for Profit Leaders.

PUBLISHERS**	BOOKS**	DIRECT BUYERS**	OTHERS**
ALL FIRMS	ALL FIRMS	ALL FIRMS	ALL FIRMS
$ 23,603	$ 17,207	$ 25,545	$ 14,737
30,401	23,591	39,423	31,320
15,677	10,312	7,556	4,270
22,634	20,899	29,941	5,264
216.86%	225.55%	80.54%	(219.61)%
83.65%	83.61%	68.02%	61.46%
6.97	6.91	16.60	26.67
9.38	9.48	15.38	11.87
$ 40,994	$ 49,277	$ 51,311	$ 51,680
49,013	60,713	77,406	87,307
44,232	53,990	63,601	78,067
597,301	710,295	350,533	198,981
44,917	53,310	64,757	70,985
52,799	65,404	87,131	105,205
47,645	58,117	71,307	94,212
1,582,050	1,465,118	273,859	150,727
259%	463%	698%	475%
65.22%	54.70%	48.86%	54.91%
115.64	113.31	95.43	79.58
$ 27,092	$ 26,683	$ 25,567	$ 28,233
24,689	22,306	23,401	23,575
34,475	79,365	26,514	36,788
43,745	37,306	36,481	35,310
$ 20,294	$ 18,177	$ 19,551	$ 17,917
19,323	16,959	17,506	18,778
15,245	33,066	17,915	16,670
31,178	30,724	32,801	9,067
35,036	73,459	44,136	34,789
25,605	43,183	37,718	12,903
49,999	118,075	45,231	41,439
45,255	0	18,923	42,566
85.1	54.0	62.7	71.7
26.55%	39.45%	32.85%	37.26%
$ 13,829	$ 25,322	$ 30,158	$ 41,579
6.92%	10.82%	4.42%	(7.71)%
$ 2,615	$ 5,914	$ 2,561	$ (3,937)

RETURN ON INVESTMENT - PER $100 OF SALES

	PRINTERS AND LITHOGRAPHERS**	ADVERTISING AGENCIES	
	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
INVESTMENT			
Current Assets:			
Cash	$ 0.25	$ 4.45	$10.64
Receivables	10.45	11.91	9.41
Inventories	4.27	2.50	1.71
Marketable securities	0.00	2.42	0.00
Other current assets	0.18	1.21	0.25
	15.15	22.49	22.01
Plant Investment:			
Land and building	13.94	0.33	0.00
Machinery and equipment	28.73	29.66	25.96
Other fixed assets	2.97	1.61	0.73
	45.64	31.60	26.69
Non-Current Assets	2.76	3.75	2.30
TOTAL INVESTMENT	63.55	57.84	51.00
INVESTMENT TURNOVER PER $100 OF SALES	157.36%	172.89%	196.08%
EARNINGS			
Cost of Product	$74.50	$71.10	$63.51
Selling Expenses	7.10	9.46	11.08
Administrative Expenses	12.45	16.37	12.39
	94.05	96.93	86.98
Income (loss) Before Interest, Other Income (Expense), and Taxes	5.95	3.07	13.02
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME (LOSS)	9.36%	5.31%	25.53%

** Sample insufficient for Profit Leaders.

PUBLISHERS**	BOOKS**	DIRECT BUYERS**	OTHERS**
ALL FIRMS	ALL FIRMS	ALL FIRMS	ALL FIRMS
$ 6.34	$ 3.23	$ 1.60	$ 3.39
23.20	14.66	16.67	19.66
8.44	6.12	1.42	1.16
0.00	0.00	0.00	0.00
1.04	0.34	4.16	0.13
39.02	24.35	23.85	24.34
7.30	0.00	0.00	0.00
27.92	27.22	31.51	10.58
7.38	5.87	6.20	0.09
42.60	33.09	37.71	10.67
1.06	0.43	3.67	0.00
82.68	57.87	65.23	35.01
120.95%	172.80%	153.30%	285.63%
$73.45	$60.55	$67.15	$ 62.74
11.48	10.61	13.76	10.79
8.67	15.07	13.02	33.55
93.60	86.23	93.93	107.08
6.40	13.77	6.07	(7.08)
7.74%	23.79%	9.31%	(20.22)%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING**		
		TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	24	$1,327,000	$2,625,000	$ 204,000
TOTAL - PROFIT LEADERS*	4	3,300,000	6,617,000	963,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$500,000	9	107,000	265,000	6,000
$500,000-$1,500,000	7	403,000	1,011,000	(22,000)
Over $3,000,000	7	3,894,000	7,423,000	696,000
PROFIT LEADERS				
Over $3,000,000	2	6,155,000	12,336,000	1,847,000
BY MARKET				
ALL FIRMS				
Printers and Lithographers	2	3,411,000	5,391,000	282,000
Advertising Agencies	11	406,000	914,000	2,000
Publishers	2	3,701,000	6,122,000	547,000
Books	2	3,616,000	8,829,000	1,366,000
Direct Buyers	5	1,104,000	2,188,000	117,000
Other	2	206,000	662,000	(50,000)
PROFIT LEADERS				
Advertising Agencies	2	445,000	897,000	79,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	

62.2% divided by 3 = 20.7%

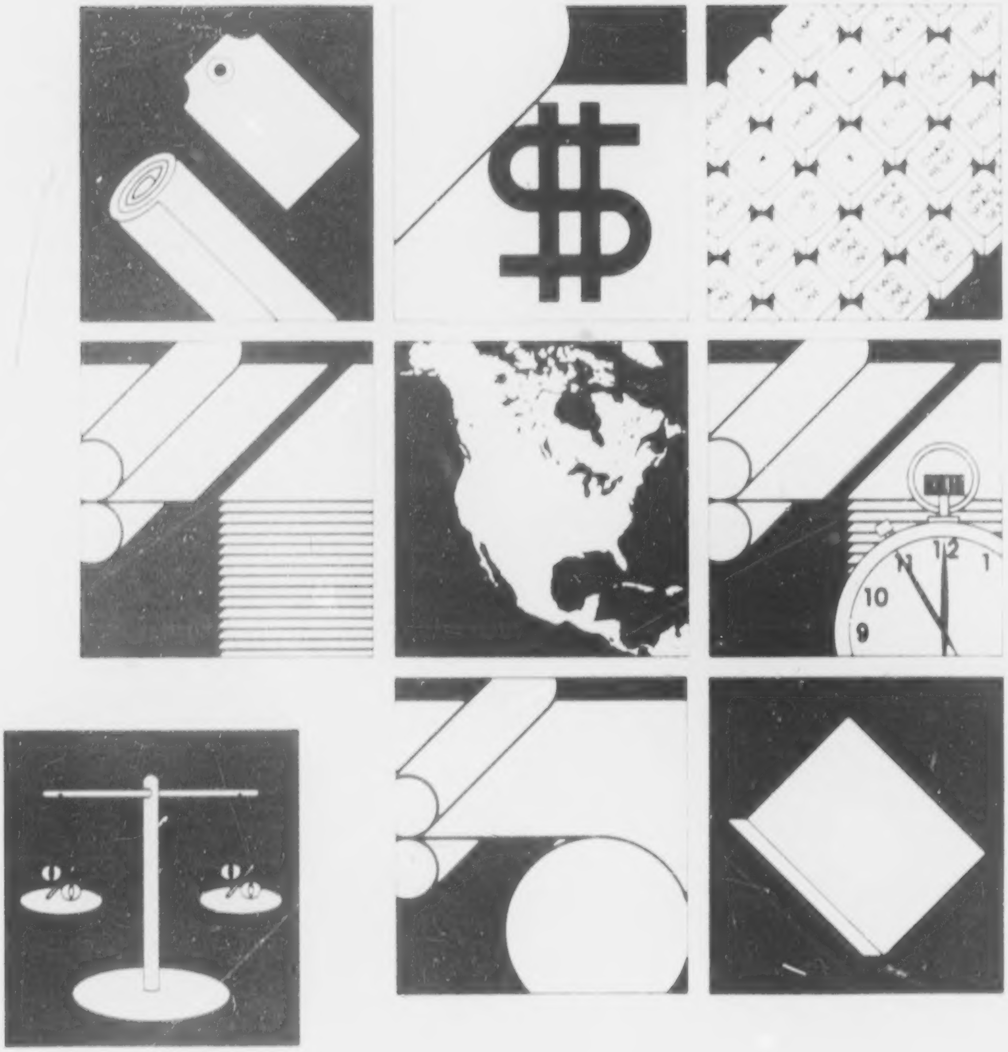
---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Unlike the ratios shown in this book, these figures are arithmetic averages.

A8740-1.12 U

10/87

1987 Financial Ratio Study



Volume XII

Preparatory Specialists

1987
FINANCIAL
RATIO STUDY

Volume XII: Preparatory Specialists

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addresses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 40 Preparatory Specialists across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales from $500,000 to $1,500,000, sales from $1,500,000 to $3,000,000, etc.; by market - for example, Printers and Lithographers, Advertising Agencies, etc.; and by type of work - for example, Black and White or Color Work. Readers can compare their firm's operations with other firms having the same sales volume, market, or type of work in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD 2

CHAPTER 1 - BY SIZE OF FIRM 4-13
- Report on Operations - Sales = 100% 4- 5
- Supporting Schedules - Sales = 100% 4- 7
- Balance Sheet 8- 9
- Significant Facts 10-11
- Return on Investment - Per $100 of Sales 12-13

CHAPTER 2 - BY MARKET 14-23
- Report on Operations - Sales = 100% 14-15
- Supporting Schedules - Sales = 100% 14-17
- Balance Sheet 18-19
- Significant Facts 20-21
- Return on Investment - Per $100 of Sales 22-23

CHAPTER 3 - BY TYPE OF WORK 24-28
- Report on Operations - Sales = 100% 24
- Supporting Schedules - Sales = 100% 24-25
- Balance Sheet 26
- Significant Facts 27
- Return on Investment - Per $100 of Sales 28

ABSOLUTE DATA 29-30

The Graphic Preparatory Association is a special industry unit of PIA which represents and supports the common interests of preparatory trade plants in serving the Graphic Arts Industry. This study of the financial ratios of preparatory specialists is but one of the services GPA offers to its members.

Each year GPA holds two major meetings. In the spring, there is a Technical Awareness Seminar for Management. The two-day session is designed to update members of technological changes in the industry. In the winter, GPA holds its Annual Meeting in a resort location. This three-day session allows a maximum flow of information among the membership through its half-day sessions, social events and the relaxing atmosphere of the resort.

In addition to the meetings and the ratio study, the Association's monthly newsletter *UP FRONT* has become a technical and management resource to over 800 Preparatory Industry leaders. Allowing them to quickly update themselves is the technical and industry news which is of interest to the Preparatory Specialist.

GPA prepares compensation surveys, a quarterly industry activity survey, and publishes an annual buyers' guide. Active membership is open to any PIA member engaged in the operation of a preparatory trade plant serving the GPA Industry. Associate membership is open to any PIA member engaged in the manufacture or distribution of supplies or equipment for use in the preparatory industry.

Ronald S. Ballard
Executive Director
Graphic Preparatory Association
(815) 734-4178

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	1.18	0.00	2.71
Other chargeable materials	14.89	15.38	13.90
Outside services	3.57	3.94	3.64
TOTAL MATERIALS	19.64	19.32	20.25
FACTORY PAYROLL	34.84	32.56	35.42
FACTORY EXPENSES	15.85	11.88	15.75
TOTAL FACTORY COST OF PRODUCT	70.33	63.76	71.42
GROSS PROFIT	29.67	36.24	28.58
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	12.25	13.00	15.03
Selling expenses	10.81	10.50	9.48
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	23.06	23.50	24.51
INCOME BEFORE INTEREST EXPENSE	6.61	12.74	4.07
Interest expense	2.28	1.60	0.71
OPERATING INCOME	4.33	11.14	3.36
Other income	0.61	0.99	1.81
INCOME BEFORE INCOME TAXES	4.94	12.13	5.17

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
OTHER CHARGEABLE MATERIALS			
Ink	0.20%	0.22%	0.32%
Film	8.85	7.08	6.98
Plates	1.83	1.26	5.72
Other chargeable materials	4.01	6.82	0.89
TOTAL OTHER CHARGEABLE MATERIALS	14.89	15.38	13.91
OUTSIDE SERVICES			
Composition	0.35	0.41	1.25
Offset preparation	1.30	1.97	0.04
Printing	0.53	0.53	0.38
Binding	0.07	0.11	0.00
Other outside services	1.32	0.92	1.97
TOTAL OUTSIDE SERVICES	3.57	3.94	3.64

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$3,000,000		SALES OVER $3,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%
0.20	0.00	1.30	0.00
17.34	15.42	14.11	16.66
4.55	2.73	2.89	3.13
22.09	18.15	18.30	19.79
31.98	36.23	36.32	30.99
15.84	11.36	15.89	11.85
69.91	65.74	70.51	62.63
30.09	34.26	29.49	37.37
13.69	12.69	10.25	10.14
10.25	10.45	11.90	11.37
23.94	23.14	22.15	21.51
6.15	11.12	7.34	15.86
2.24	1.25	2.75	2.29
3.91	9.87	4.59	13.57
1.10	2.08	0.07	0.61
5.01	11.95	4.66	14.18

0.32%	0.66%	0.11%	0.00%
11.45	2.63	8.08	7.60
1.32	1.31	0.92	0.00
4.25	10.82	5.00	9.06
17.34	15.42	14.11	16.66
0.54	0.41	0.05	0.32
1.45	0.27	1.27	2.04
0.52	0.82	0.57	0.59
0.08	0.41	0.08	0.00
1.96	0.82	0.92	0.18
4.55	2.73	2.89	3.13

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.34%	1.26%	2.75%
Direct wages	25.00	24.73	24.29
General factory salaries and wages	1.93	0.96	0.83
Packing, shipping and delivery wages	0.50	0.51	0.80
Payroll taxes	2.44	2.30	2.56
Employee benefits	2.63	2.80	4.19
TOTAL FACTORY PAYROLL	34.84	32.56	35.42
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.54	0.39	0.00
Depreciation - other	5.17	4.15	3.74
Taxes - real estate	0.15	0.07	0.20
Taxes - other	0.27	0.33	0.10
Insurance	0.82	0.60	1.29
Building rent	1.86	2.10	2.87
Utilities - heat, light, etc.	1.28	0.91	2.09
Equipment rental	0.86	0.49	0.32
Total Fixed Expenses	10.95	9.04	10.61
Other Expenses			
Factory supplies and expense	1.61	1.02	2.03
Packing, shipping and delivery expense	0.97	0.65	1.44
Repairs and maintenance	1.38	0.84	1.19
Other factory expenses	0.94	0.33	0.48
Total Other Expenses	4.90	2.84	5.14
TOTAL FACTORY EXPENSES	15.85	11.88	15.75
ADMINISTRATIVE EXPENSES			
Salaries - executive	4.20	5.38	6.75
Salaries - office	2.14	1.75	2.64
Payroll taxes	0.65	0.51	0.59
Employee benefits	0.88	1.01	1.32
Bad debts	0.36	0.37	0.32
Office supplies and expenses	0.49	0.50	0.62
Professional fees	0.61	0.49	0.46
Taxes - business	0.20	0.28	0.09
Telephone	0.65	0.84	0.70
Other administrative expenses	2.07	1.87	1.54
TOTAL ADMINISTRATIVE EXPENSES	12.25	13.00	15.03
SELLING EXPENSES			
Salaries - executive	1.30	1.77	2.70
Salaries and commissions - salesmen	5.55	5.22	3.24
Salaries - sales office clerical	0.32	0.13	0.00
Payroll taxes	0.47	0.48	0.54
Employee benefits	0.39	0.55	0.26
Advertising	0.58	0.52	0.43
Travel and entertainment	1.53	1.37	1.43
Other selling expenses	0.67	0.46	0.88
TOTAL SELLING EXPENSES	10.81	10.50	9.48

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$3,000,000		SALES OVER $3,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
1.93%	1.60%	2.54%	1.88%
23.84	26.33	25.76	24.90
2.06	1.98	2.25	0.02
0.27	0.58	0.55	0.25
2.47	2.72	2.39	1.96
1.41	3.02	2.83	1.98
31.98	36.23	36.32	30.99
0.30	0.30	0.83	0.71
5.37	4.60	5.46	4.11
0.09	0.08	0.17	0.10
0.36	0.61	0.26	0.12
0.94	0.74	0.65	0.69
1.91	1.84	1.34	0.62
1.16	1.10	1.17	1.11
1.31	0.06	0.82	1.08
11.44	9.33	10.70	8.54
1.14	0.23	1.78	1.22
0.51	0.34	1.07	0.90
0.99	1.46	1.65	0.62
1.76	0.00	0.69	0.57
4.40	2.03	5.19	3.31
15.84	11.36	15.89	11.85
4.32	4.61	2.88	3.10
2.35	2.03	2.00	1.48
1.08	0.54	0.41	0.26
1.22	2.82	0.64	0.31
0.22	(0.16)	0.46	0.68
0.57	0.29	0.42	0.37
0.48	0.30	0.68	0.40
0.32	0.64	0.17	0.15
0.56	0.67	0.67	0.95
2.57	0.95	1.92	2.44
13.69	12.69	10.25	10.14
0.92	1.74	1.16	1.04
6.00	5.22	6.22	6.66
0.05	0.26	0.56	0.13
0.56	0.49	0.42	0.43
0.21	0.36	0.53	0.86
0.41	0.27	0.73	0.89
1.38	1.96	1.66	1.21
0.72	0.15	0.62	0.15
10.25	10.45	11.90	11.37

BALANCE SHEET

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	5.88%	6.27%	9.31%
Receivables	35.88	38.84	44.09
Inventories	5.36	4.30	5.65
Other current assets	6.23	4.68	9.21
TOTAL CURRENT ASSETS	53.35	54.09	68.26
FIXED ASSETS			
Real estate	7.93	14.14	3.89
Less: Accumulated depreciation	2.44	4.05	3.10
	5.49	10.09	0.79
Machinery and equipment	70.04	55.98	65.30
Less: Accumulated depreciation	38.86	29.33	49.44
	31.18	26.65	15.86
Other fixed assets	13.77	5.51	25.87
Less: Accumulated depreciation	8.45	3.01	19.93
	5.32	2.50	5.94
NET FIXED ASSETS	41.99	39.24	22.59
OTHER ASSETS	4.66	6.67	9.15
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	11.16	7.87	6.67
Accounts payable	9.28	7.99	8.20
Other current liabilities	7.32	10.71	7.50
TOTAL CURRENT LIABILITIES	27.76	26.57	22.37
LONG-TERM LIABILITIES	35.71	23.15	13.01
TOTAL LIABILITIES	63.47	49.72	35.38
SHAREHOLDERS' AND PROPRIETORS' EQUITY	36.53	50.28	64.62
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.92	2.04	3.05
QUICK RATIO	1.73	1.87	2.80
TOTAL LIABILITIES TO EQUITY	1.74	0.99	0.55
LONG-TERM LIABILITIES TO EQUITY	0.98	0.46	0.20
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.55	0.52	0.76

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$3,000,000		SALES OVER $3,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
4.79%	1.82%	5.18%	4.18%
33.27	30.79	33.77	29.93
5.35	2.47	5.18	4.42
6.39	4.33	5.58	7.40
49.80	39.41	49.71	45.93
7.75	7.30	9.47	22.62
2.76	2.89	2.20	3.06
4.99	4.41	7.27	19.56
71.24	68.15	70.83	49.05
35.89	33.03	36.86	19.62
35.35	35.12	33.97	29.43
8.91	2.41	13.25	5.44
4.51	1.52	7.42	2.13
4.40	0.89	5.83	3.31
44.74	40.42	47.07	52.30
5.46	20.17	3.22	1.77
100.00	100.00	100.00	100.00
12.92	16.35	11.74	5.45
9.39	6.24	9.00	5.79
4.66	5.91	8.73	16.33
26.97	28.50	29.47	27.57
35.96	3.77	40.94	33.39
62.93	32.27	70.41	60.96
37.07	67.73	29.59	39.04
100.00	100.00	100.00	100.00

1.85	1.38	1.69	1.67
1.65	1.30	1.51	1.51
1.70	0.48	2.38	1.56
0.97	0.06	1.38	0.86
0.50	0 48	0.52	0.40

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 44,353	$ 52,233	$ 29,364
Average assets per factory employee (Excluding Executives)	64,635	77,222	46,107
Average net worth per employee - All employees	16,576	29,099	19,646
Average gross plant investment per factory employee (Excluding Executives)	57,282	57,386	37,301
Net worth percentage of fixed assets	179.71%	154.10%	378.53%
EMPLOYEES			
Percent factory - All employees	75.03%	71.77%	69.97%
Percent administrative - All employees	13.78	15.82	17.88
Percent sales - All employees	11.19	12.41	12.15
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 74,225	$ 75,415	$ 64,602
Sales per factory employee	100,073	105,258	92,988
Sales less material per factory employee	80,403	84,646	74,147
Sales per administrative employee	725,324	624,880	375,914
EXCLUDING EXECUTIVES			
Sales per employee - All employees	82,874	85,620	76,196
Sales per factory employee	106,197	108,339	98,896
Sales less material per factory employee	85,414	87,122	78,811
SALES PER SALESMAN	651,459	610,301	358,532
SALES TO CURRENT ASSETS	367%	330%	381%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	50.74%	49.36%	53.46%
Factory payroll percentage of gross plant investment	94.36	79.66	96.63
Payroll per employee - All employees	$ 37,600	$ 37,242	$ 34,371
Payroll per factory employee	34,529	34,422	32,961
Payroll per administrative employee	43,734	39,724	39,969
Payroll per sales employee	52,458	53,822	32,973
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 29,455	$ 28,866	$ 24,344
Payroll per factory employee	28,615	28,550	25,329
Payroll per administrative employee	16,991	14,541	14,150
Payroll per sales employee	44,646	44,123	23,612
EXECUTIVE PAYROLL			
Payroll per executive - All executives	62,033	54,123	55,493
Payroll per factory executive	39,879	51,415	38,851
Payroll per administrative executive	83,369	78,937	89,555
Payroll per sales executive	45,843	30,913	33,334
RECEIVABLES			
Collection period	71.9	78.7	69.7
PROFIT			
Gross profit percentage of sales	29.67%	36.24%	28.58%
Average gross profit per factory employee	$ 31,948	$ 39,147	$ 28,865
Income before taxes percentage of sales	4.94%	12.13%	5.17%
Average income before taxes per employee	$ 3,729	$ 9,438	$ 3,540

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$3,000,000 ALL FIRMS	SALES FROM $1,500,000-$3,000,000 PROFIT LEADERS	SALES OVER $3,000,000 ALL FIRMS	SALES OVER $3,000,000 PROFIT LEADERS
$ 46,991	$ 80,824	$ 48,210	$ 52,892
72,827	130,621	67,140	70,211
19,838	58,678	14,725	20,748
61,227	94,882	62,334	54,423
308.13%	176.26%	65.35%	75.26%
72.62%	66.47%	78.00%	79.14%
15.57	17.12	10.88	10.64
11.81	16.41	11.12	10.22
$ 71,952	$ 83,786	$ 79,155	$ 82,485
101,732	126,482	102,418	104,227
79,281	103,512	83,625	82,863
510,023	490,249	954,625	891,346
80,438	94,198	86,375	88,813
107,330	131,845	109,144	107,841
83,761	107,908	89,225	85,710
510,666	335,017	765,795	905,392
383%	332%	359%	344%
48.70%	54.29%	51.14%	45.27%
135.58	69.29	72.98	66.67
$ 35,035	$ 45,610	$ 40,410	$ 37,336
31,856	45,393	36,862	32,153
40,234	47,977	47,316	38,090
48,080	40,641	62,346	86,088
$ 27,825	$ 34,563	$ 32,151	$ 29,921
27,211	38,073	30,663	27,013
17,237	14,970	18,415	16,180
43,645	33,811	52,912	71,187
51,444	59,193	70,836	61,221
48,166	125,855	37,828	36,065
57,892	68,310	97,115	70,618
23,618	26,586	62,451	41,072
69.8	79.5	72.6	70.4
30.09%	34.26%	29.49%	37.37%
$ 33,085	$ 45,188	$ 32,495	$ 40,295
5.01%	11.95%	4.66%	14.18%
$ 3,760	$ 9,892	$ 3,739	$ 11,931

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES FROM $500,000-$1,500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 3.49	$ 3.34	$ 5.70
Receivables	19.28	21.13	18.94
Inventories	3.02	2.87	2.64
Marketable securities	1.74	2.61	4.19
Other current assets	2.46	1.52	0.97
	29.99	31.47	32.44
Plant Investment:			
Land and building	5.56	11.05	2.01
Machinery and equipment	40.14	36.41	25.31
Other fixed assets	7.36	3.47	11.29
	53.06	50.93	38.61
Non-Current Assets	3.50	9.00	5.29
TOTAL INVESTMENT	86.55	91.40	76.34
INVESTMENT TURNOVER PER $100 OF SALES	115.54%	109.41%	130.99%
EARNINGS			
Cost of Product	$70.33	$63.76	$71.42
Selling Expenses	10.81	10.50	9.48
Administrative Expenses	12.25	13.00	15.03
	93.39	87.26	95.93
Income Before Interest, Other Income, and Taxes	6.61	12.74	4.07
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.64%	13.94%	5.33%

** Sample insufficient for Profit Leaders.

SALES FROM $1,500,000-$3,000,000		SALES OVER $3,000,000	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
$ 2.54	$ 1.86	$ 3.27	$ 2.83
18.57	21.51	19.44	18.72
3.15	3.76	3.04	2.58
0.91	5.01	1.56	2.74
3.53	0.89	2.42	2.71
28.70	33.03	29.73	29.58
5.72	11.10	6.71	16.24
44.34	57.15	42.61	32.15
5.28	3.67	7.55	3.33
55.34	71.92	56.87	51.72
6.40	29.49	1.71	1.19
90.44	134.44	88.31	82.49
110.57%	74.38%	113.24%	121.23%
$69.91	$65.74	$70.51	$62.63
10.25	10.45	11.90	11.37
13.69	12.69	10.25	10.14
93.85	88.88	92.66	84.14
6.15	11.12	7.34	15.86
6.80%	8.27%	8.31%	19.23%

REPORT ON OPERATIONS - SALES = 100%

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	2.17	0.00	1.40	0.00
Other chargeable materials	14.40	14.43	14.82	16.76
Outside services	3.70	7.78	2.64	2.86
TOTAL MATERIALS	20.27	22.21	18.86	19.62
FACTORY PAYROLL	34.49	30.82	34.87	38.55
FACTORY EXPENSES	15.69	11.46	15.50	10.51
TOTAL FACTORY COST OF PRODUCT	70.45	64.49	69.23	68.68
GROSS PROFIT	29.55	35.51	30.77	31.32
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	14.11	13.98	12.35	10.33
Selling expenses	8.18	6.87	14.00	11.99
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	22.29	20.85	26.35	22.32
INCOME BEFORE INTEREST EXPENSE	7.26	14.66	4.42	9.00
Interest expense	2.35	2.08	2.06	0.88
OPERATING INCOME	4.91	12.58	2.36	8.12
Other income (expense)	0.76	0.06	1.70	1.19
INCOME BEFORE INCOME TAXES	5.67	12.64	4.06	9.31

SUPPORTING SCHEDULES - SALES = 100%

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
OTHER CHARGEABLE MATERIALS				
Ink	0.26%	0.00%	0.24%	0.00%
Film	10.42	8.88	10.02	5.53
Plates	1.44	0.00	0.62	2.38
Other chargeable materials	2.28	5.55	3.94	8.85
TOTAL OTHER CHARGEABLE MATERIALS	14.40	14.43	14.82	16.76
OUTSIDE SERVICES				
Composition	0.09	0.48	0.99	0.59
Offset preparation	1.39	6.25	0.33	0.00
Printing	0.82	1.05	0.34	0.00
Binding	0.02	0.00	0.10	0.00
Other outside services	1.38	0.00	0.88	2.27
TOTAL OUTSIDE SERVICES	3.70	7.78	2.64	2.86

** Sample insufficient for Profit Leaders.

PUBLISHERS		CARTON MANUFACTURERS**	OTHER**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%
0.40	0.00	0.00	0.00
14.43	16.06	18.37	14.92
3.74	0.58	3.13	7.35
18.57	16.64	21.50	22.27
35.95	30.82	34.46	32.98
17.08	14.19	16.98	13.31
71.60	61.65	72.94	68.56
28.40	38.35	27.06	31.44
10.68	13.29	11.43	10.63
7.93	10.62	10.74	14.23
18.61	23.91	22.17	24.86
9.79	14.44	4.89	6.58
3.30	2.28	1.03	1.24
6.49	12.16	3.86	5.34
(1.93)	0.92	1.65	1.54
4.56	13.08	5.51	6.88

0.05%	0.00%	0.00%	0.44%
6.47	8.09	6.90	7.88
1.11	0.00	10.52	0.88
6.80	7.97	0.95	5.72
14.43	16.06	18.37	14.92
0.00	0.00	0.00	0.26
3.04	0.32	0.00	0.72
0.53	0.00	0.00	0.68
0.05	0.00	0.00	0.26
0.12	0.26	3.13	5.43
3.74	0.58	3.13	7.35

SUPPORTING SCHEDULES - SALES = 100%

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.03%	0.97%	2.95%	1.23%
Direct wages	25.62	24.93	24.52	27.60
General factory salaries and wages	1.44	0.00	1.34	1.36
Packing, shipping and delivery wages	0.12	0.00	0.81	0.83
Payroll taxes	2.70	2.06	2.39	3.13
Employee benefits	2.58	2.86	2.86	4.40
TOTAL FACTORY PAYROLL	34.49	30.82	34.87	38.55
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.45	0.52	0.96	0.00
Depreciation - other	5.14	4.65	5.22	3.46
Taxes - real estate	0.21	0.00	0.12	0.00
Taxes - other	0.26	0.22	0.33	0.36
Insurance	0.90	0.33	0.69	0.62
Building rent	2.29	3.40	1.94	3.03
Utilities - heat, light, etc.	1.39	0.36	1.01	0.82
Equipment rental	0.35	0.32	0.86	0.06
Total Fixed Expenses	10.99	9.80	11.13	8.35
Other Expenses				
Factory supplies and expense	1.26	0.44	1.40	1.07
Packing, shipping and delivery expense	0.92	0.41	0.68	0.25
Repairs and maintenance	1.07	0.74	1.50	0.60
Other factory expenses	1.45	0.07	0.79	0.24
Total Other Expenses	4.70	1.66	4.37	2.16
TOTAL FACTORY EXPENSES	15.69	11.46	15.50	10.51
ADMINISTRATIVE EXPENSES				
Salaries - executive	5.74	8.76	3.77	2.53
Salaries - office	1.78	0.39	2.50	3.05
Payroll taxes	1.01	0.69	0.53	0.51
Employee benefits	1.02	0.09	0.97	1.19
Bad debts	0.24	0.16	0.55	0.41
Office supplies and expenses	0.58	0.29	0.54	0.96
Professional fees	0.57	0.92	0.63	0.15
Taxes - business	0.16	0.30	0.11	0.03
Telephone	0.57	0.61	0.61	0.58
Other administrative expenses	2.44	1.77	2.14	0.92
TOTAL ADMINISTRATIVE EXPENSES	14.11	13.98	12.35	10.33
SELLING EXPENSES				
Salaries - executive	0.42	0.00	2.09	2.90
Salaries and commissions - salesmen	5.13	5.15	7.38	5.39
Salaries - sales office clerical	0.20	0.00	0.12	0.00
Payroll taxes	0.40	0.18	0.63	0.77
Employee benefits	0.38	0.68	0.34	0.28
Advertising	0.41	0.18	0.79	0.19
Travel and entertainment	1.03	0.68	1.78	1.22
Other selling expenses	0.21	0.00	0.87	1.24
TOTAL SELLING EXPENSES	8.18	6.87	14.00	11.99

** Sample insufficient for Profit Leaders.

PUBLISHERS		CARTON MANUFACTURERS**	OTHER**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
1.44%	1.86%	3.71%	1.94%
26.34	25.29	23.43	22.60
3.49	0.03	0.89	2.84
0.47	0.37	0.35	0.66
2.25	2.01	2.56	2.08
1.96	1.26	3.52	2.86
35.95	30.82	34.46	32.98
0.26	0.55	0.13	0.20
6.05	4.26	2.62	5.03
0.15	0.15	0.04	0.16
0.14	0.18	0.15	0.50
0.92	0.93	1.15	0.55
1.29	0.93	2.72	0.74
1.27	1.30	2.34	1.07
1.68	1.32	0.47	0.70
11.76	9.62	9.62	8.95
2.03	1.82	2.83	1.47
1.16	1.35	1.88	0.99
1.37	0.54	1.47	1.88
0.76	0.86	1.18	0.02
5.32	4.57	7.36	4.36
17.08	14.19	16.98	13.31
3.56	4.17	2.90	3.90
2.04	1.83	2.68	1.50
0.51	0.36	0.59	0.34
0.43	0.38	0.54	1.67
0.39	0.99	0.10	0.16
0.36	0.39	0.47	0.30
0.45	0.45	1.23	0.52
0.31	0.00	0.18	0.43
0.78	1.33	0.76	0.67
1.85	3.39	1.98	1.14
10.68	13.29	11.43	10.63
0.80	1.57	1.58	2.01
3.40	4.84	4.64	6.01
0.55	0.20	0.00	1.32
0.30	0.46	0.43	0.48
0.25	0.60	0.28	1.12
0.60	1.18	0.19	0.51
1.17	1.55	2.66	2.16
0.86	0.22	0.96	0.62
7.93	10.62	10.74	14.23

BALANCE SHEET

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	3.93%	6.56%	7.80%	8.42%
Receivables	39.66	52.36	37.85	53.10
Inventories	4.50	8.31	4.67	2.01
Other current assets	4.33	0.59	7.33	1.22
TOTAL CURRENT ASSETS	52.42	67.82	57.65	64.75
FIXED ASSETS				
Real estate	12.67	12.27	3.44	8.26
Less: Accumulated depreciation	4.29	1.94	1.77	6.68
	8.38	10.33	1.67	1.58
Machinery and equipment	79.01	53.95	69.94	64.03
Less: Accumulated depreciation	46.38	34.64	38.05	34.47
	32.63	19.31	31.89	29.56
Other fixed assets	12.62	4.05	12.49	5.70
Less: Accumulated depreciation	9.80	3.20	7.75	2.99
	2.82	0.85	4.74	2.71
NET FIXED ASSETS	43.83	30.49	38.30	33.85
OTHER ASSETS	3.75	1.69	4.05	1.40
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	8.95	3.01	12.26	15.53
Accounts payable	8.26	16.39	8.56	6.13
Other current liabilities	7.55	12.59	8.33	6.69
TOTAL CURRENT LIABILITIES	24.76	31.99	29.15	28.35
LONG-TERM LIABILITIES	42.29	41.91	28.66	0.28
TOTAL LIABILITIES	67.05	73.90	57.81	28.63
SHAREHOLDERS' AND PROPRIETORS' EQUITY	32.95	26.10	42.19	71.37
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	2.12	2.12	1.98	2.28
QUICK RATIO	1.94	1.86	1.82	2.21
TOTAL LIABILITIES TO EQUITY	2.03	2.83	1.37	0.40
LONG-TERM LIABILITIES TO EQUITY	1.28	1.61	0.68	0.00
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.59	0.64	0.54	0.54

** Sample insufficient for Profit Leaders.

PUBLISHERS		CARTON MANUFACTURERS**	OTHER**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
5.94%	6.00%	1.20%	8.56%
28.82	23.53	41.87	28.10
5.45	2.25	10.86	5.97
5.43	10.88	12.44	4.21
45.64	42.66	66.37	46.84
12.78	21.67	0.00	4.86
2.19	2.66	0.00	1.93
10.59	19.01	0.00	2.93
70.38	53.55	39.42	67.26
33.82	20.75	32.24	36.83
36.56	32.80	7.18	30.43
9.94	7.11	38.91	10.27
5.85	2.81	18.83	4.19
4.09	4.30	20.08	6.08
51.24	56.11	27.26	39.44
3.12	1.23	6.37	13.72
100.00	100.00	100.00	100.00
11.73	8.18	15.63	7.97
11.02	2.65	10.41	10.05
5.09	14.03	6.33	9.38
27.84	24.86	32.37	27.40
45.40	35.35	6.14	45.04
73.24	60.21	38.51	72.44
26.76	39.79	61.49	27.56
100.00	100.00	100.00	100.00

1.64	1.72	2.05	1.71
1.44	1.63	1.71	1.49
2.74	1.51	0.63	2.63
1.70	0.89	0.10	1.63
0.48	0.39	0.82	0.55

SIGNIFICANT FACTS

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 38,478	$ 36,448	$ 44,390	$ 32,557
Average assets per factory employee (Excluding Executives)	58,202	47,950	66,319	49,192
Average net worth per employee - All employees	12,641	11,348	17,343	22,216
Average gross plant investment per factory employee (Excluding Executives)	54,920	33,077	58,300	39,429
Net worth percentage of fixed assets	81.06%	87.00%	329.29%	266.85%
EMPLOYEES				
Percent factory - All employees	74.14%	75.49%	72.67%	68.82%
Percent administrative - All employees	17.21	20.59	12.69	13.94
Percent sales - All employees	8.65	3.92	14.64	17.24
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 72,081	$ 76,499	$ 74,358	$ 76,085
Sales per factory employee	99,183	98,343	102,904	109,983
Sales less material per factory employee	78,731	75,510	83,835	88,588
Sales per administrative employee	547,008	738,976	616,203	550,412
EXCLUDING EXECUTIVES				
Sales per employee - All employees	82,835	91,887	83,131	85,260
Sales per factory employee	105,951	101,366	110,499	115,047
Sales less material per factory employee	84,265	77,745	90,151	92,741
SALES PER SALESMAN	727,758	1,275,000	498,919	262,798
SALES TO CURRENT ASSETS	424%	333%	330%	379%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	50.58%	46.76%	53.21%	55.19%
Factory payroll percentage of gross plant investment	75.61	95.53	130.48	116.76
Payroll per employee - All employees	$ 36,272	$ 35,377	$ 39,507	$ 42,251
Payroll per factory employee	33,334	30,441	36,109	43,134
Payroll per administrative employee	37,835	26,192	42,370	40,150
Payroll per sales employee	50,219	80,162	57,095	39,102
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 28,419	$ 28,920	$ 30,717	$ 33,154
Payroll per factory employee	27,485	25,041	29,519	35,174
Payroll per administrative employee	12,768	7,000	19,728	21,105
Payroll per sales employee	43,723	68,734	49,493	32,588
EXECUTIVE PAYROLL				
Payroll per executive - All executives	51,396	37,733	61,079	45,864
Payroll per factory executive	35,032	25,750	37,929	19,500
Payroll per administrative executive	73,033	37,617	88,058	109,500
Payroll per sales executive	20,676	0	53,500	20,000
RECEIVABLES				
Collection period	71.4	86.8	76.7	82.7
PROFIT				
Gross profit percentage of sales	29.55%	35.51%	30.77%	31.32%
Average gross profit per factory employee	$ 32,451	$ 35,967	$ 33,702	$ 35,016
Income before taxes percentage of sales	5.67%	12.64%	4.06%	9.31%
Average income before taxes per employee	$ 4,525	$ 10,713	$ 3,029	$ 7,048

** Sample insufficient for Profit Leaders.

PUBLISHERS		CARTON MANUFACTURERS**	OTHER**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 47,962	$ 53,089	$ 33,331	$ 65,911
62,381	72,666	49,294	102,472
14,103	21,269	20,284	31,135
58,155	59,858	38,054	77,794
53.69%	70.90%	321.55%	79.63%
80.75%	76.55%	74.44%	72.82%
11.46	12.04	16.48	10.48
7.79	11.41	9.08	16.70
$ 78,617	$ 71,474	$ 64,691	$ 77,823
97,861	94,364	87,479	109,352
79,453	78,481	68,585	85,183
1,155,209	670,777	431,014	893,038
84,156	77,700	75,643	85,206
100,284	96,762	96,153	114,812
81,533	80,518	75,357	89,225
848,596	720,588	511,375	625,847
387%	326%	312%	323%
47.79%	45.23%	48.10%	51.34%
73.47	53.25	87.43	64.13
$ 37,621	$ 32,310	$ 31,072	$ 40,036
34,834	28,811	29,833	35,327
54,665	43,946	26,765	55,905
47,466	48,971	52,723	53,747
$ 30,705	$ 25,325	$ 23,788	$ 29,277
30,301	24,843	23,130	28,969
18,198	17,270	16,205	16,862
40,017	38,046	43,004	40,937
73,071	66,140	39,536	94,868
21,042	28,347	36,327	126,810
87,780	80,352	36,733	132,786
41,939	61,608	39,733	120,206
63.8	66.4	78.6	69.6
28.40%	38.35%	27.06%	31.44%
$ 28,720	$ 37,428	$ 26,296	$ 37,256
4.56%	13.08%	5.51%	6.88%
$ 3,307	$ 9,342	$ 3,642	$ 5,436

RETURN ON INVESTMENT - PER $100 OF SALES

	PRINTERS AND LITHOGRAPHERS		ADVERTISING AGENCIES	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 1.83	$ 2.78	$ 4.84	$ 3.32
Receivables	19.13	23.77	20.64	22.23
Inventories	2.35	3.85	2.61	0.78
Marketable securities	0.00	0.00	2.07	0.00
Other current assets	2.72	0.27	2.82	0.52
	26.03	30.67	32.98	26.85
Plant Investment:				
Land and building	7.38	6.16	2.38	3.20
Machinery and equipment	38.07	24.34	42.10	27.89
Other fixed assets	4.93	1.79	7.66	2.21
	50.38	32.29	52.14	33.30
Non-Current Assets	1.67	0.83	2.77	0.62
TOTAL INVESTMENT	78.08	63.79	87.89	60.77
INVESTMENT TURNOVER PER $100 OF SALES	128.07%	156.76%	113.78%	164.55%
EARNINGS				
Cost of Product	$70.45	$64.49	$69.23	$68.68
Selling Expenses	8.18	6.87	14.00	11.99
Administrative Expenses	14.11	13.98	12.35	10.33
	92.74	85.34	95.58	91.00
Income Before Interest, Other Income (Expense), and Taxes	7.26	14.66	4.42	9.00
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	9.30%	22.98%	5.03%	14.81%

** Sample insufficient for Profit Leaders.

PUBLISHERS		CARTON MANUFACTURERS**	OTHER**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 3.81	$ 4.11	$ 0.54	$ 5.22
16.98	17.34	21.47	18.18
3.12	1.67	5.48	4.62
1.34	4.12	5.53	3.99
2.59	3.96	1.17	0.68
27.84	31.20	34.19	32.69
9.53	18.20	0.00	7.40
43.71	38.15	18.47	49.69
5.38	4.47	21.33	6.83
58.62	60.82	39.80	63.92
1.45	1.07	3.43	19.81
87.91	93.09	77.42	116.42
113.75%	107.42%	129.17%	85.90%
$71.60	$61.65	$72.94	$68.56
7.93	10.62	10.74	14.23
10.68	13.29	11.43	10.63
90.21	85.56	95.11	93.42
9.79	14.44	4.89	6.58
11.14%	15.51%	6.32%	5.65%

REPORT ON OPERATIONS - SALES = 100%

	BLACK AND WHITE		COLOR WORK	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	3.22	0.00	0.89	0.00
Other chargeable materials	12.48	13.43	15.23	16.17
Outside services	4.17	6.36	3.48	2.97
TOTAL MATERIALS	19.87	19.79	19.60	19.14
FACTORY PAYROLL	33.76	31.25	34.99	33.09
FACTORY EXPENSES	16.80	12.43	15.72	11.65
TOTAL FACTORY COST OF PRODUCT	70.43	63.47	70.31	63.88
GROSS PROFIT	29.57	36.53	29.69	36.12
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	17.58	17.61	11.50	11.15
Selling expenses	7.87	9.24	11.23	11.01
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	25.45	26.85	22.73	22.16
INCOME BEFORE INTEREST EXPENSE	4.12	9.68	6.96	13.96
Interest expense	0.68	0.92	2.51	1.87
OPERATING INCOME	3.44	8.76	4.45	12.09
Other income	1.65	0.49	0.47	1.20
INCOME BEFORE INCOME TAXES	5.09	9.25	4.92	13.29

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS				
Ink	0.39%	0.00%	0.16%	0.34%
Film	7.36	10.70	9.07	5.12
Plates	4.50	2.38	1.37	0.67
Other chargeable materials	0.23	0.35	4.63	10.04
TOTAL OTHER CHARGEABLE MATERIALS	12.48	13.43	15.23	16.17
OUTSIDE SERVICES				
Composition	1.51	0.56	0.20	0.35
Offset preparation	1.60	3.48	1.26	1.37
Printing	0.08	0.17	0.58	0.67
Binding	0.00	0.00	0.08	0.16
Other outside services	0.98	2.15	1.36	0.42
TOTAL OUTSIDE SERVICES	4.17	6.36	3.48	2.97

SUPPORTING SCHEDULES - SALES = 100%

	BLACK AND WHITE		COLOR WORK	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.30%	0.00%	2.34%	1.77%
Direct wages	23.50	22.85	25.22	25.48
General factory salaries and wages	0.99	1.36	2.06	0.80
Packing, shipping and delivery wages	0.73	0.83	0.47	0.38
Payroll taxes	2.54	2.39	2.42	2.26
Employee benefits	3.70	3.82	2.48	2.40
TOTAL FACTORY PAYROLL	33.76	31.25	34.99	33.09
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.00	0.00	0.62	0.55
Depreciation - other	4.25	3.77	5.32	4.30
Taxes - real estate	0.24	0.00	0.13	0.09
Taxes - other	0.17	0.37	0.28	0.31
Insurance	1.12	0.33	0.78	0.71
Building rent	4.11	4.59	1.54	1.11
Utilities - heat, light, etc.	1.57	0.43	1.23	1.11
Equipment rental	0.40	0.02	0.93	0.67
Total Fixed Expenses	11.86	9.51	10.83	8.85
Other Expenses				
Factory supplies and expense	1.67	1.50	1.61	0.82
Packing, shipping and delivery expense	1.71	0.57	0.86	0.68
Repairs and maintenance	1.06	0.54	1.42	0.96
Other factory expenses	0.50	0.31	1.00	0.34
Total Other Expenses	4.94	2.92	4.89	2.80
TOTAL FACTORY EXPENSES	16.80	12.43	15.72	11.65
ADMINISTRATIVE EXPENSES				
Salaries - executive	10.07	9.58	3.37	3.70
Salaries - office	1.84	1.86	2.18	1.70
Payroll taxes	0.64	0.87	0.65	0.37
Employee benefits	1.24	0.26	0.83	1.31
Bad debts	0.25	0.44	0.38	0.34
Office supplies and expenses	0.71	0.90	0.46	0.34
Professional fees	0.69	0.82	0.60	0.36
Taxes - business	0.06	0.10	0.22	0.35
Telephone	0.72	0.85	0.64	0.84
Other administrative expenses	1.36	1.93	2.17	1.84
TOTAL ADMINISTRATIVE EXPENSES	17.58	17.61	11.50	11.15
SELLING EXPENSES				
Salaries - executive	2.68	2.90	1.10	1.32
Salaries and commissions - salesmen	2.09	3.03	6.05	6.10
Salaries - sales office clerical	0.00	0.00	0.37	0.18
Payroll taxes	0.47	0.55	0.47	0.45
Employee benefits	0.19	0.28	0.41	0.66
Advertising	0.47	0.20	0.59	0.64
Travel and entertainment	1.34	1.04	1.56	1.51
Other selling expenses	0.63	1.24	0.68	0.15
TOTAL SELLING EXPENSES	7.87	9.24	11.23	11.01

BALANCE SHEET

	BLACK AND WHITE		COLOR WORK	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	11.56%	13.86%	5.07%	3.24%
Receivables	47.27	60.27	34.26	30.27
Inventories	5.31	5.94	5.37	3.64
Other current assets	9.83	0.93	5.71	6.17
TOTAL CURRENT ASSETS	73.97	81.00	50.41	43.32
FIXED ASSETS				
Real estate	4.67	8.26	8.39	16.49
Less: Accumulated depreciation	3.72	6.68	2.25	2.99
	0.95	1.58	6.14	13.50
Machinery and equipment	63.74	54.19	70.94	56.68
Less: Accumulated depreciation	48.32	40.19	37.51	24.98
	15.42	14.00	33.43	31.70
Other fixed assets	23.23	8.70	12.42	4.23
Less: Accumulated depreciation	18.64	5.81	7.00	1.88
	4.59	2.89	5.42	2.35
NET FIXED ASSETS	20.96	18.47	44.99	47.55
OTHER ASSETS	5.07	0.53	4.60	9.13
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	3.15	3.01	12.30	9.81
Accounts payable	7.92	13.04	9.48	5.97
Other current liabilities	6.68	7.10	7.41	12.16
TOTAL CURRENT LIABILITIES	17.75	23.15	29.19	27.94
LONG-TERM LIABILITIES	19.06	27.17	38.09	21.55
TOTAL LIABILITIES	36.81	50.32	67.28	49.49
SHAREHOLDERS' AND PROPRIETORS' EQUITY	63.19	49.68	32.72	50.51
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	4.17	3.50	1.73	1.55
QUICK RATIO	3.87	3.24	1.54	1.42
TOTAL LIABILITIES TO EQUITY	0.58	1.01	2.06	0.98
LONG-TERM LIABILITIES TO EQUITY	0.30	0.55	1.16	0.43
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.76	0.74	0.53	0.44

SIGNIFICANT FACTS

	BLACK AND WHITE		COLOR WORK	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 27,127	$ 22,656	$ 46,813	$ 64,065
Average assets per factory employee (Excluding Executives)	42,892	34,339	67,741	94,375
Average net worth per employee - All employees	18,879	12,046	16,247	35,920
Average gross plant investment per factory employee (Excluding Executives)	32,007	24,334	60,892	70,607
Net worth percentage of fixed assets	399.62%	250.19%	148.29%	115.66%
EMPLOYEES				
Percent factory - All employees	69.73%	66.05%	75.79%	74.07%
Percent administrative - All employees	19.84	22.27	12.91	13.23
Percent sales - All employees	10.43	11.68	11.30	12.70
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 56,528	$ 56,440	$ 76,753	$ 83,006
Sales per factory employee	81,464	85,580	102,731	113,129
Sales less material per factory employee	65,161	68,455	82,580	91,122
Sales per administrative employee	330,975	259,812	781,660	730,907
EXCLUDING EXECUTIVES				
Sales per employee - All employees	72,032	72,251	84,423	90,967
Sales per factory employee	86,457	85,580	109,018	117,442
Sales less material per factory employee	69,102	68,455	87,745	94,589
SALES PER SALESMAN	275,596	275,596	663,205	677,242
SALES TO CURRENT ASSETS	346%	307%	370%	339%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	53.00%	50.57%	50.42%	48.88%
Factory payroll percentage of gross plant investment	93.80	109.51	94.44	67.72
Payroll per employee - All employees	$ 29,899	$ 28,733	$ 38,700	$ 40,646
Payroll per factory employee	27,259	26,856	35,568	37,449
Payroll per administrative employee	40,719	33,919	44,165	42,045
Payroll per sales employee	18,127	18,602	57,363	67,910
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 20,947	$ 21,588	$ 30,670	$ 31,778
Payroll per factory employee	21,143	21,331	29,683	31,437
Payroll per administrative employee	10,363	11,655	17,937	15,696
Payroll per sales employee	11,654	13,838	49,359	56,237
EXECUTIVE PAYROLL				
Payroll per executive - All executives	42,076	38,405	64,884	60,410
Payroll per factory executive	14,463	0	43,509	71,981
Payroll per administrative executive	80,634	102,042	83,760	69,695
Payroll per sales executive	21,289	20,000	49,350	35,278
RECEIVABLES				
Collection period	76.3	90.4	71.3	74.0
PROFIT				
Gross profit percentage of sales	29.57%	36.53%	29.69%	36.12%
Average gross profit per factory employee	$ 26,029	$ 31,385	$ 32,794	$ 42,252
Income before taxes percentage of sales	5.09%	9.25%	4.92%	13.29%
Average income before taxes per employee	$ 2,894	$ 5,245	$ 3,849	$ 11,115

RETURN ON INVESTMENT - PER $100 OF SALES

	BLACK AND WHITE		COLOR WORK	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 7.09	$ 5.57	$ 2.97	$ 2.44
Receivables	20.72	24.38	19.08	19.83
Inventories	2.54	2.43	3.09	3.05
Marketable securities	5.03	0.00	1.27	3.65
Other current assets	0.68	0.37	2.71	1.98
	36.06	32.75	29.12	30.95
Plant Investment:				
Land and building	2.41	3.20	6.02	14.19
Machinery and equipment	24.80	22.11	42.34	42.15
Other fixed assets	10.42	3.47	6.91	3.47
	37.63	28.78	55.27	59.81
Non-Current Assets	4.09	0.21	3.41	12.51
TOTAL INVESTMENT	77.78	61.74	87.80	103.27
INVESTMENT TURNOVER PER $100 OF SALES	128.57%	161.97%	113.90%	96.83%
EARNINGS				
Cost of Product	$70.43	$63.47	$70.31	$63.88
Selling Expenses	7.87	9.24	11.23	11.01
Administrative Expenses	17.58	17.61	11.50	11.15
	95.88	90.32	93.04	86.04
Income Before Interest, Other Income, and Taxes	4.12	9.68	6.96	13.96
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	5.30%	15.68%	7.93%	13.52%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING**		
		TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME
TOTAL - ALL FIRMS	40	$ 3,042,000	$ 5,015,000	$ 288,000
TOTAL - PROFIT LEADERS*	7	4,326,000	6,566,000	893,000
BY SIZE OF FIRM				
ALL FIRMS				
$500,000-$1,500,000	6	349,000	793,000	46,000
$1,500,000-$3,000,000	11	1,469,000	2,154,000	116,000
Over $3,000,000	22	4,695,000	7,812,000	452,000
PROFIT LEADERS				
$1,500,000-$3,000,000	2	2,572,000	2,242,000	287,000
Over $3,000,000	3	8,250,000	13,500,000	1,861,000
BY MARKET				
ALL FIRMS				
Printers and Lithographers	11	2,709,000	4,449,000	279,000
Advertising Agencies	14	1,613,000	2,689,000	92,000
Publishers	9	5,732,000	9,500,000	661,000
Carton Manufacturers	3	1,474,000	2,603,000	86,000
Other	3	4,425,000	6,902,000	316,000
PROFIT LEADERS				
Printers and Lithographers	2	1,400,000	2,810,000	449,000
Advertising Agencies	2	495,000	1,134,000	104,000
Publishers	2	11,036,000	17,585,000	2,356,000
BY TYPE OF WORK				
ALL FIRMS				
Black and White	5	249,000	518,000	25,000
Color Work	35	3,441,000	5,658,000	326,000
PROFIT LEADERS				
Black and White	2	194,000	490,000	46,000
Color Work	5	5,979,000	8,997,000	1,232,000

---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages. See explanatory note on page 30.

HOW THE NUMBERS ARE COMPUTED

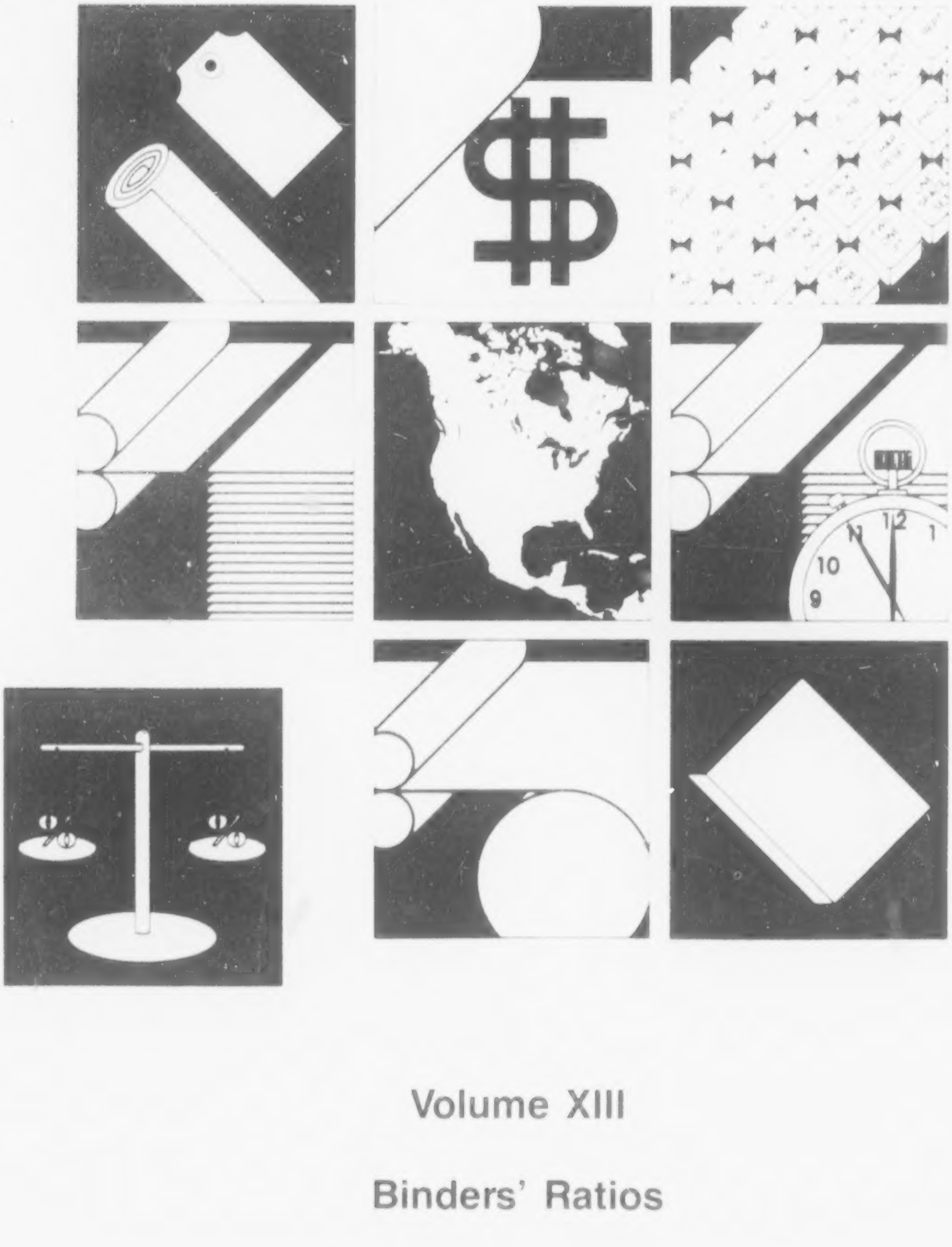
The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2%	divided by 3 = 20.7%

A8740-1.13 U
10/87

1987
Financial Ratio Study



Volume XIII

Binders' Ratios

1987
FINANCIAL
RATIO STUDY

Volume XIII: Binders' Ratios

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 19 Binders across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales to $500,000, sales from $500,000 to $1,500,000, etc., and by product specialty for example, Pamphlet, Edition Books, etc. Readers can compare their firm's operations with other firms having the same sales volume or product specialty in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H R Margolis Company

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

CHAPTER 1 - BY SIZE OF FIRM.................................. 4-13
- Report on Operations - Sales = 100%.......................... 4- 5
- Supporting Schedules - Sales = 100%.......................... 6- 7
- Balance Sheet.. 8- 9
- Significant Facts.. 10-11
- Return on Investment - Per $100 of Sales.................... 12-13

CHAPTER 2 - BY PRODUCT SPECIALTY............................. 14-23
- Report on Operations - Sales = 100%.......................... 14-15
- Supporting Schedules - Sales = 100%.......................... 16-17
- Balance Sheet.. 18-19
- Significant Facts.. 20-21
- Return on Investment - Per $100 of Sales.................... 22-23

ABSOLUTE DATA.. 24

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $500,000**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	2.22	0.00	0.00
Chargeable materials	7.97	5.61	2.94
Outside services	2.38	3.14	1.94
TOTAL MATERIALS	12.57	8.75	4.88
FACTORY PAYROLL	45.62	41.44	49.01
FACTORY EXPENSES	19.45	20.11	22.25
TOTAL FACTORY COST OF PRODUCT	77.64	70.30	76.14
GROSS PROFIT	22.36	29.70	23.86
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	12.20	13.96	11.74
Selling expenses	4.46	3.54	3.47
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	16.66	17.50	15.21
INCOME BEFORE INTEREST EXPENSE	5.70	12.20	8.65
Interest expense	2.12	2.21	1.63
OPERATING INCOME	3.58	9.99	7.02
Other income	0.51	0.18	2.67
INCOME BEFORE INCOME TAXES	4.09	10.17	9.69

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000 ALL FIRMS	PROFIT LEADERS	SALES FROM $1,500,000-$3,000,000** ALL FIRMS	SALES OVER $3,000,000** ALL FIRMS
100.00%	100.00%	100.00%	100.00%
1.42	0.00	0.00	3.32
3.06	6.10	6.09	11.01
1.96	3.60	5.00	2.13
6.44	9.70	11.09	16.46
46.37	38.92	48.55	44.21
20.64	20.61	16.77	18.99
73.45	69.23	76.41	79.66
26.55	30.77	23.59	20.34
12.72	17.24	12.85	11.97
3.83	1.43	5.02	4.77
16.55	18.67	17.87	16.74
10.00	12.10	5.72	3.60
3.35	1.70	3.04	1.60
6.65	10.40	2.68	2.00
0.35	0.09	0.81	0.11
7.00	10.49	3.49	2.11

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	2.78%	3.93%	3.92%
Direct wages	32.97	31.33	38.72
General factory salaries and wages	1.48	1.20	0.53
Packing, shipping and delivery wages	1.50	0.60	0.77
Payroll taxes	3.22	2.91	3.16
Employee benefits	3.67	1.47	1.91
TOTAL FACTORY PAYROLL	45.62	41.44	49.01
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.34	0.00	0.00
Depreciation - other	3.72	3.82	3.47
Taxes - real estate	0.33	0.05	0.00
Taxes - other	0.20	0.31	0.43
Insurance	1.11	1.37	1.57
Building rent	2.67	3.09	4.48
Utilities - heat, light, etc.	1.87	1.21	2.54
Equipment rental	1.19	2.18	0.00
Total Fixed Expenses	11.43	12.03	12.49
Other Expenses			
Factory supplies and expense	2.42	3.45	3.76
Packing, shipping and delivery expense	2.20	1.42	2.06
Repairs and maintenance	2.50	1.98	3.45
Other factory expenses	0.90	1.23	0.49
Total Other Expenses	8.02	8.08	9.76
TOTAL FACTORY EXPENSES	19.45	20.11	22.25
ADMINISTRATIVE EXPENSES			
Salaries - executive	3.95	5.31	2.53
Salaries - office	3.26	3.04	4.82
Payroll taxes	0.59	0.52	0.82
Employee benefits	0.77	0.52	0.61
Bad debts	0.55	0.55	0.00
Office supplies and expenses	0.44	0.56	0.44
Professional fees	0.67	0.70	0.62
Taxes - business	0.17	0.15	0.02
Telephone	0.48	0.32	0.56
Other administrative expenses	1.32	2.29	1.32
TOTAL ADMINISTRATIVE EXPENSES	12.20	13.96	11.74
SELLING EXPENSES			
Salaries - executive	0.98	1.37	2.09
Salaries and commissions - salesmen	1.47	0.44	0.00
Salaries - sales office clerical	0.28	0.00	0.00
Payroll taxes	0.17	0.27	0.52
Employee benefits	0.24	0.10	0.19
Advertising	0.32	0.20	0.25
Travel and entertainment	0.76	0.89	0.40
Other selling expenses	0.24	0.27	0.02
TOTAL SELLING EXPENSES	4.46	3.54	3.47

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
4.16%	5.82%	1.23%	2.35%
34.84	28.91	35.36	30.83
0.00	0.00	0.00	2.45
0.00	0.00	3.23	1.86
3.00	2.61	4.95	2.99
4.37	1.58	3.78	3.73
46.37	38.92	48.55	44.21
0.86	0.00	0.00	0.28
3.49	4.25	6.20	3.39
0.48	0.13	0.24	0.35
0.20	0.39	0.44	0.12
1.97	2.81	0.36	0.85
1.67	3.33	2.19	2.79
1.87	1.25	0.82	1.94
0.32	0.50	1.01	1.75
10.86	12.66	11.26	11.47
4.20	2.79	0.23	1.93
2.06	1.83	2.15	2.29
2.18	1.01	2.37	2.46
1.34	2.32	0.76	0.84
9.78	7.95	5.51	7.52
20.64	20.61	16.77	18.99
6.71	9.68	2.24	3.50
2.38	3.14	3.25	3.29
0.21	0.42	0.46	0.72
0.69	0.84	0.33	0.92
0.74	1.09	0.26	0.64
0.50	0.54	0.52	0.39
0.62	0.63	0.63	0.70
0.20	0.12	0.14	0.19
0.43	0.29	0.51	0.49
0.24	0.49	4.51	1.13
12.72	17.24	12.85	11.97
0.99	0.58	0.51	0.86
1.66	0.00	0.50	1.86
0.00	0.00	1.47	0.22
0.00	0.01	0.23	0.16
0.17	0.02	0.13	0.29
0.00	0.01	0.59	0.39
0.74	0.80	1.26	0.74
0.27	0.01	0.33	0.25
3.83	1.43	5.02	4.77

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	6.62%	4.84%	0.95%
Receivables	29.53	23.21	12.50
Inventories	5.13	4.59	5.31
Other current assets	10.08	8.95	33.77
TOTAL CURRENT ASSETS	51.36	41.59	52.53
FIXED ASSETS			
Real estate	12.24	0.95	0.00
Less: Accumulated depreciation	2.63	0.00	0.00
	9.61	0.95	0.00
Machinery and equipment	78.71	82.12	124.06
Less: Accumulated depreciation	48.38	32.08	82.24
	30.33	50.04	41.82
Other fixed assets	8.37	7.30	7.66
Less: Accumulated depreciation	4.82	3.01	4.20
	3.55	4.29	3.46
NET FIXED ASSETS	43.49	55.28	45.28
OTHER ASSETS	5.15	3.13	2.19
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	12.23	10.00	1.85
Accounts payable	6.95	6.80	5.15
Other current liabilities	6.84	5.19	2.11
TOTAL CURRENT LIABILITIES	26.02	21.99	9.11
LONG-TERM LIABILITIES	26.23	31.94	39.76
TOTAL LIABILITIES	52.25	53.93	48.87
SHAREHOLDERS' AND PROPRIETORS' EQUITY	47.75	46.07	51.13
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.97	1.89	5.77
QUICK RATIO	1.78	1.68	5.18
TOTAL LIABILITIES TO EQUITY	1.09	1.17	0.96
LONG-TERM LIABILITIES TO EQUITY	0.55	0.69	0.78
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.61	0.39	0.66

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
6.49%	8.53%	10.48%	7.00%
22.57	18.39	27.61	35.51
2.82	4.25	0.00	6.87
9.62	17.34	3.17	7.20
41.50	48.51	41.26	56.58
25.09	2.38	0.00	12.03
4.27	0.00	0.00	3.00
20.82	2.38	0.00	9.03
57.18	76.17	87.91	76.61
28.18	34.93	38.62	51.35
29.00	41.24	49.29	25.26
6.05	9.92	12.59	8.58
1.83	2.05	8.02	5.44
4.22	7.87	4.57	3.14
54.04	51.49	53.86	37.43
4.46	0.00	4.88	5.99
100.00	100.00	100.00	100.00
7.89	3.46	17.12	14.82
4.08	2.75	14.12	7.01
5.30	1.72	8.32	7.99
17.27	7.93	39.56	29.82
26.80	23.10	33.76	22.20
44.07	31.03	73.32	52.02
55.93	68.97	26.68	47.98
100.00	100.00	100.00	100.00
2.40	6.12	1.04	1.90
2.24	5.58	1.04	1.67
0.79	0.45	2.75	1.08
0.48	0.33	1.27	0.46
0.49	0.46	0.44	0.67

CHAPTER 1 - BY SIZE OF FIRM

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES TO $500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 23,475	$ 25,381	$ 20,139
Average assets per factory employee (Excluding Executives)	28,294	31,873	24,185
Average net worth per employee - All employees	11,054	12,131	10,961
Average gross plant investment per factory employee (Excluding Executives)	28,048	29,008	32,704
Net worth percentage of fixed assets	169.42%	123.54%	507.24%
EMPLOYEES			
Percent factory - All employees	87.12%	85.81%	86.70%
Percent administrative - All employees	9.99	12.40	10.99
Percent sales - All employees	2.89	1.79	2.31
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 41,799	$ 41,521	$ 28,945
Sales per factory employee	48,210	48,802	33,450
Sales less material per factory employee	41,313	44,165	31,540
Sales per administrative employee	470,365	350,061	275,468
EXCLUDING EXECUTIVES			
Sales per employee - All employees	45,145	46,905	31,249
Sales per factory employee	50,289	52,150	34,305
Sales less material per factory employee	43,068	47,205	32,813
SALES PER SALESMAN	1,246,722	1,059,735	0
SALES TO CURRENT ASSETS	407%	471%	433%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	57.34%	53.00%	60.59%
Factory payroll percentage of gross plant investment	90.44	77.32	56.88
Payroll per employee - All employees	$ 23,282	$ 21,892	$ 17,639
Payroll per factory employee	21,163	19,819	16,405
Payroll per administrative employee	36,412	31,653	22,255
Payroll per sales employee	43,092	37,912	14,731
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 17,704	$ 16,483	$ 14,028
Payroll per factory employee	17,210	16,548	13,846
Payroll per administrative employee	17,586	15,024	15,167
Payroll per sales employee	34,732	14,376	0
EXECUTIVE PAYROLL			
Payroll per executive - All executives	53,851	54,158	34,815
Payroll per factory executive	32,933	27,428	34,815
Payroll per administrative executive	84,679	58,091	23,820
Payroll per sales executive	21,468	29,456	10,995
RECEIVABLES			
Collection period	60.2	53.4	33.4
PROFIT			
Gross profit percentage of sales	22.36%	29.70%	23.86%
Average gross profit per factory employee	$ 11,613	$ 15,647	$ 8,011
Income before taxes percentage of sale	4.09%	10.17%	9.69%
Average income before taxes per employee	$ 1,861	$ 4,143	$ 2,639

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 32,148	$ 29,955	$ 21,295	$ 21,324
41,893	40,275	24,669	24,755
16,589	19,213	5,701	10,032
39,427	36,172	24,824	23,649
143.40%	202.79%	48.15%	139.51%
81.68%	81.98%	87.77%	89.07%
14.23	17.57	9.05	8.43
4.09	0.45	3.18	2.50
$ 47,228	$ 52,009	$ 41,246	$ 42,262
57,839	63,441	46,995	47,612
54,007	57,286	41,787	38,388
361,709	296,334	479,097	543,724
54,713	62,120	42,469	44,679
62,011	69,619	47,801	49,295
57,832	62,909	42,508	39,666
0	0	0	1,246,722
466%	443%	477%	368%
59.17%	53.61%	57.67%	56.03%
100.97	81.87	95.10	91.87
$ 27,606	$ 27,890	$ 23,799	$ 22,641
26,285	24,693	22,825	19,864
32,761	41,911	28,476	41,756
34,943	35,425	35,832	52,532
$ 20,764	$ 19,844	$ 18,568	$ 17,103
21,149	20,054	18,388	16,176
12,191	18,184	17,202	20,058
16,659	0	29,200	48,624
40,681	52,219	73,008	58,619
28,086	41,833	18,149	37,042
44,755	59,350	80,950	110,939
28,416	33,850	30,000	19,294
51.1	39.5	53.4	69.7
26.55%	30.77%	23.59%	20.34%
$ 16,871	$ 21,487	$ 11,139	$ 10,441
7.00%	10.49%	3.49%	2.11%
$ 3,495	$ 5,452	$ 1,397	$ 1,210

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO $500,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Current Assets:			
Cash	$ 3.51	$ 2.72	$ 0.52
Receivables	16.04	14.59	9.10
Inventories	2.62	2.82	3.42
Marketable securities	4.13	3.30	20.17
Other current assets	1.10	1.35	1.77
	27.40	24.78	34.98
Plant Investment:			
Land and building	8.52	0.46	0.00
Machinery and equipment	46.40	52.60	85.48
Other fixed assets	4.37	4.27	4.98
	59.29	57.33	90.46
Non-Current Assets	3.23	1.95	1.41
TOTAL INVESTMENT	89.92	84.06	126.85
INVESTMENT TURNOVER PER $100 OF SALES	111.21%	118.96%	78.83%
EARNINGS			
Cost of Product	$77.64	$70.30	$76.14
Selling Expenses	4.46	3.54	3.47
Administrative Expenses	12.20	13.96	11.74
	94.30	87.80	91.35
Income Before Interest, Other Income, and Taxes	5.70	12.20	8.65
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	6.34%	14.51%	6.82%

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000		SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000**
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS
$ 3.63	$ 4.45	$ 5.27	$ 3.69
13.44	10.83	14.29	18.56
1.33	2.05	0.00	3.42
4.12	8.25	0.00	1.97
0.69	0.16	1.67	1.03
23.21	25.74	21.23	28.67
19.26	1.15	0.00	7.71
41.36	44.67	45.21	41.34
3.38	5.82	6.49	4.23
64.00	51.64	51.70	53.28
4.02	0.00	2.54	3.41
91.23	77.38	75.47	85.36
109.61%	129.23%	132.50%	117.15%
$73.45	$69.23	$76.41	$79.66
3.83	1.43	5.02	4.77
12.72	17.24	12.85	11.97
90.00	87.90	94.28	96.40
10.00	12.10	5.72	3.60
10.96%	15.64%	7.58%	4.22%

REPORT ON OPERATIONS - SALES = 100%

	PAMPHLET		EDITION BOOKS	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	0.81	0.00	0.00	0.00
Chargeable materials	3.07	2.13	15.34	11.90
Outside services	3.10	7.27	1.10	0.58
TOTAL MATERIALS	6.98	9.40	16.44	12.48
FACTORY PAYROLL	52.71	41.35	39.78	37.82
FACTORY EXPENSES	20.49	16.37	18.86	22.67
TOTAL FACTORY COST OF PRODUCT	80.18	67.12	75.08	72.97
GROSS PROFIT	19.82	32.88	24.92	27.03
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	12.80	17.88	12.22	13.89
Selling expenses	3.99	2.62	3.72	2.80
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	16.79	20.50	15.94	16.69
INCOME BEFORE INTEREST EXPENSE	3.03	12.38	8.98	10.34
Interest expense	2.36	2.59	1.72	1.30
OPERATING INCOME	0.67	9.79	7.26	9.04
Other income (expense)	0.58	0.09	0.09	(0.13)
INCOME BEFORE INCOME TAXES	1.25	9.88	7.35	8.91

** Sample insufficient for Profit Leaders.

LOOSELEAF**	NO PREDOMINANT SPECIALTY**	OTHER**
ALL FIRMS	ALL FIRMS	ALL FIRMS
100.00%	100.00%	100.00%
12.17	0.00	0.00
14.63	2.93	6.26
0.00	1.94	5.08
26.80	4.87	11.34
34.11	49.02	46.11
16.48	22.25	18.92
77.39	76.14	76.37
22.61	23.86	23.63
10.68	11.74	12.60
4.81	3.47	6.85
15.49	15.21	19.45
7.12	8.65	4.18
3.58	1.63	0.96
3.54	7.02	3.22
0.18	2.67	(0.25)
3.72	9.69	2.97

SUPPORTING SCHEDULES - SALES = 100%

	PAMPHLET		EDITION BOOKS	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	2.52%	3.68%	4.06%	4.76%
Direct wages	38.30	32.23	26.25	25.62
General factory salaries and wages	0.75	0.00	2.99	3.01
Packing, shipping and delivery wages	2.32	0.98	0.93	0.27
Payroll taxes	4.44	3.38	2.94	2.40
Employee benefits	4.38	1.08	2.61	1.76
TOTAL FACTORY PAYROLL	52.71	41.35	39.78	37.82
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.60	0.00	0.00	0.00
Depreciation - other	4.13	4.62	2.67	2.72
Taxes - real estate	0.65	0.00	0.06	0.13
Taxes - other	0.17	0.16	0.31	0.61
Insurance	1.18	1.30	1.24	1.68
Building rent	1.35	1.43	4.38	4.26
Utilities - heat, light, etc.	2.10	0.69	1.86	1.49
Equipment rental	1.48	1.25	2.55	4.20
Total Fixed Expenses	11.66	9.45	13.07	15.09
Other Expenses				
Factory supplies and expense	1.92	1.66	2.33	3.50
Packing, shipping and delivery expense	3.38	2.56	0.81	0.61
Repairs and maintenance	2.59	1.50	1.65	1.78
Other factory expenses	0.94	1.20	1.00	1.69
Total Other Expenses	8.83	6.92	5.79	7.58
TOTAL FACTORY EXPENSES	20.49	16.37	18.86	22.67
ADMINISTRATIVE EXPENSES				
Salaries - executive	3.81	6.19	4.91	7.08
Salaries - office	3.17	2.90	3.13	3.11
Payroll taxes	0.64	0.67	0.37	0.23
Employee benefits	0.57	0.33	0.91	0.98
Bad debts	0.61	1.09	0.58	0.27
Office supplies and expenses	0.51	0.74	0.35	0.30
Professional fees	0.62	0.92	0.48	0.38
Taxes - business	0.11	0.13	0.14	0.24
Telephone	0.56	0.38	0.41	0.26
Other administrative expenses	2.20	4.53	0.94	1.04
TOTAL ADMINISTRATIVE EXPENSES	12.80	17.88	12.22	13.89
SELLING EXPENSES				
Salaries - executive	1.10	0.00	0.67	1.34
Salaries and commissions - salesmen	0.66	0.50	1.53	0.59
Salaries - sales office clerical	0.56	0.00	0.00	0.00
Payroll taxes	0.11	0.05	0.14	0.10
Employee benefits	0.06	0.02	0.05	0.05
Advertising	0.34	0.10	0.18	0.15
Travel and entertainment	0.92	1.62	0.77	0.24
Other selling expenses	0.24	0.33	0.38	0.33
TOTAL SELLING EXPENSES	3.99	2.62	3.72	2.80

** Sample insufficient for Profit Leaders.

LOOSELEAF**	NO PREDOMINANT SPECIALTY**	OTHER**
ALL FIRMS	ALL FIRMS	ALL FIRMS
1.21%	3.92%	2.49%
27.47	38.73	31.18
0.59	0.53	2.68
0.50	0.77	1.83
0.50	3.16	3.48
3.84	1.91	4.45
34.11	49.02	46.11
0.79	0.00	0.00
3.14	3.47	4.90
0.45	0.00	0.04
0.13	0.43	0.05
0.66	1.57	0.91
0.92	4.48	3.98
1.32	2.54	1.46
0.60	0.00	0.08
8.01	12.49	11.42
3.87	3.76	1.35
1.85	2.06	1.76
2.68	3.45	2.62
0.07	0.49	1.77
8.47	9.76	7.50
16.48	22.25	18.92
4.67	2.53	3.19
1.97	4.82	3.87
0.50	0.82	0.72
0.61	0.61	1.34
0.32	0.00	0.99
0.42	0.44	0.37
0.52	0.62	1.23
0.07	0.02	0.56
0.58	0.56	0.27
1.02	1.32	0.06
10.68	11.74	12.60
0.21	2.09	1.19
3.48	0.00	2.27
0.00	0.00	0.47
0.00	0.52	0.31
0.31	0.19	0.86
0.14	0.25	0.64
0.48	0.40	0.87
0.19	0.02	0.24
4.81	3.47	6.85

BALANCE SHEET

	PAMPHLET		EDITION BOOKS	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	5.80%	2.13%	6.36%	10.75%
Receivables	31.15	25.33	32.05	24.24
Inventories	1.81	0.00	11.74	11.49
Other current assets	2.16	2.84	10.48	17.71
TOTAL CURRENT ASSETS	40.92	30.30	60.63	64.19
FIXED ASSETS				
Real estate	20.28	0.00	1.19	2.38
Less: Accumulated depreciation	5.96	0.00	0.00	0.00
	14.32	0.00	1.19	2.38
Machinery and equipment	72.23	79.23	74.89	80.59
Less: Accumulated depreciation	36.33	18.06	48.41	56.78
	35.90	61.17	26.48	23.81
Other fixed assets	8.43	11.23	8.85	6.58
Less: Accumulated depreciation	5.10	5.98	2.84	1.50
	3.33	5.25	6.01	5.08
NET FIXED ASSETS	53.55	66.42	33.68	31.27
OTHER ASSETS	5.53	3.28	5.69	4.54
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	14.72	13.74	13.08	9.41
Accounts payable	7.09	10.90	6.42	1.73
Other current liabilities	6.26	5.67	6.21	6.34
TOTAL CURRENT LIABILITIES	28.07	30.31	25.71	17.48
LONG-TERM LIABILITIES	25.90	30.79	14.35	9.30
TOTAL LIABILITIES	53.97	61.10	40.06	26.78
SHAREHOLDERS' AND PROPRIETORS' EQUITY	46.03	38.90	59.94	73.22
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.46	1.00	2.36	3.67
QUICK RATIO	1.39	1.00	1.90	3.01
TOTAL LIABILITIES TO EQUITY	1.17	1.57	0.67	0.37
LONG-TERM LIABILITIES TO EQUITY	0.56	0.79	0.24	0.13
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.50	0.23	0.65	0.70

** Sample insufficient for Profit Leaders.

LOOSELEAF**	NO PREDOMINANT SPECIALTY**	OTHER**
ALL FIRMS	ALL FIRMS	ALL FIRMS
7.73%	0.95%	11.58%
22.68	12.50	40.57
4.83	5.31	4.24
19.53	33.77	2.80
54.77	52.53	59.19
24.86	0.00	3.76
1.88	0.00	0.88
22.98	0.00	2.88
58.74	124.06	88.62
43.24	82.24	59.04
15.50	41.82	29.58
5.84	7.66	10.61
3.84	4.20	8.20
2.00	3.46	2.41
40.48	45.28	34.87
4.75	2.19	5.94
100.00	100.00	100.00
3.38	1.85	21.08
9.79	5.15	5.68
11.15	2.11	7.88
24.32	9.11	34.64
30.54	39.76	29.50
54.86	48.87	64.14
45.14	51.13	35.86
100.00	100.00	100.00

2.25	5.77	1.71
2.05	5.18	1.59
1.22	0.96	1.79
0.68	0.78	0.82
0.74	0.66	0.67

CHAPTER 2 - BY PRODUCT SPECIALTY

SIGNIFICANT FACTS

	PAMPHLET		EDITION BOOKS	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 22,034	$ 28,119	$ 23,159	$ 26,002
Average assets per factory employee (Excluding Executives)	26,639	36,150	27,993	32,504
Average net worth per employee - All employees	9,749	10,947	14,103	18,812
Average gross plant investment per factory employee (Excluding Executives)	26,658	33,303	23,992	29,089
Net worth percentage of fixed assets	93.97%	59.54%	190.97%	245.54%
EMPLOYEES				
Percent factory - All employees	87.17%	84.75%	88.39%	85.94%
Percent administrative - All employees	11.03	14.57	10.21	12.59
Percent sales - All employees	1.80	0.68	1.40	1.47
SALES - VALUE OF PRODUCT PRODUCED				
INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 37,296	$ 46,131	$ 46,917	$ 45,528
Sales per factory employee	43,120	54,736	53,296	53,423
Sales less material per factory employee	39,909	49,783	44,445	46,782
Sales per administrative employee	357,131	326,847	508,526	390,458
EXCLUDING EXECUTIVES				
Sales per employee - All employees	40,573	52,180	51,463	51,928
Sales per factory employee	45,183	58,702	56,572	57,324
Sales less material per factory employee	41,824	53,463	47,195	50,198
SALES PER SALESMAN	1,100,000	0	1,733,328	1,059,735
SALES TO CURRENT ASSETS	447%	563%	346%	273%
PAYROLL - INCLUDING TAXES AND BENEFITS				
INCLUDING EXECUTIVES				
Total payroll percentage of sales	63.40%	52.00%	51.48%	51.29%
Factory payroll percentage of gross plant investment	99.37	79.84	101.58	78.86
Payroll per employee - All employees	$ 22,955	$ 23,734	$ 24,421	$ 23,901
Payroll per factory employee	21,860	22,091	21,454	20,695
Payroll per administrative employee	28,089	32,010	42,443	40,823
Payroll per sales employee	34,970	16,617	82,355	63,432
PAYROLL - EXCLUDING TAXES AND BENEFITS				
EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 17,487	$ 17,991	$ 18,118	$ 17,357
Payroll per factory employee	17,509	18,385	17,302	17,046
Payroll per administrative employee	15,097	13,923	20,148	18,638
Payroll per sales employee	34,676	14,716	57,444	22,474
EXECUTIVE PAYROLL				
Payroll per executive - All executives	51,098	74,150	53,123	50,251
Payroll per factory executive	28,679	21,000	37,781	36,575
Payroll per administrative executive	53,165	76,400	127,433	68,829
Payroll per sales executive	23,752	0	31,322	62 644
RECEIVABLES				
Collection period	66.9	54.5	59.7	55.3
PROFIT				
Gross profit percentage of sales	19.82%	32.88%	24.92%	27.03%
Average gross profit per factory employee	$ 9,912	$ 19,507	$ 14,040	$ 15,492
Income before taxes percentage of sales	1.25%	9.88%	7.35%	8.91%
Average income before taxes per employee	$ 944	$ 4,655	$ 3,404	$ 4,089

** Sample insufficient for Profit Leaders.

LOOSELEAF**	NO PREDOMINANT SPECIALTY**	OTHER**
ALL FIRMS	ALL FIRMS	ALL FIRMS
$ 33,035	$ 20,139	$ 19,921
40,842	24,185	22,747
13,636	10,961	7,514
38,594	32,704	23,048
163.07%	507.24%	97.87%
83.50%	86.70%	89.22%
8.59	10.99	8.00
7.91	2.31	2.78
$ 52,018	$ 28,945	$ 43,833
62,117	33,450	49,237
44,696	31,540	43,547
680,993	275,468	602,999
55,491	31,249	46,308
64,038	34,805	50,401
45,803	32,813	44,570
144,706	0	1,182,366
393%	433%	388%
45.86%	60.59%	60.35%
66.10	56.88	101.49
$ 23,304	$ 17,639	$ 26,263
20,827	16,405	22,658
44,312	22,255	49,325
26,341	14,731	45,349
$ 18,342	$ 14,028	$ 19,473
17,755	13,846	18,089
13,383	15,167	25,794
23,580	0	38,836
68,354	34,815	59,435
18,813	34,815	49,262
142,550	23,820	83,907
13,559	10,995	17,888
49.7	33.4	73.7
22.61%	23.86%	23.63%
$ 14,160	$ 8,011	$ 12,197
3.72%	9.69%	2.97%
$ 1,824	$ 2,639	$ 1,460

RETURN ON INVESTMENT - PER $100 OF SALES

	PAMPHLET		EDITION BOOKS	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 2.97	$ 1.38	$ 3.41	$ 6.01
Receivables	17.93	14.92	15.91	15.09
Inventories	1.01	0.00	6.03	7.04
Marketable securities	0.02	0.00	4.12	8.25
Other current assets	1.14	1.55	0.90	0.42
	23.07	17.85	30.37	36.81
Plant Investment:				
Land and building	12.71	0.00	0.57	1.15
Machinery and equipment	44.23	47.98	38.81	48.57
Other fixed assets	5.01	6.73	4.10	3.62
	61.95	54.71	43.48	53.34
Non-Current Assets	3.16	1.74	3.04	3.13
TOTAL INVESTMENT	88.18	74.30	76.89	93.28
INVESTMENT TURNOVER PER $100 OF SALES	113.40%	134.59%	130.06%	107.20%
EARNINGS				
Cost of Product	$80.18	$67.12	$75.08	$72.97
Selling Expenses	3.99	2.62	3.72	2.80
Administrative Expenses	12.80	17.88	12.22	13.89
	96.97	87.62	91.02	89.66
Income Before Interest, Other Income (Expense), and Taxes	3.03	12.38	8.98	10.34
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	3.44%	16.66%	11.68%	11.08%

** Sample insufficient for Profit Leaders.

LOOSELEAF**	NO PREDOMINANT SPECIALTY**	OTHER**
ALL FIRMS	ALL FIRMS	ALL FIRMS
$ 4.17	$ 0.52	$ 6.22
12.85	9.10	19.62
2.21	3.42	1.70
7.19	20.17	0.00
0.73	1.77	1.21
27.15	34.98	28.75
22.14	0.00	1.40
39.12	85.48	42.82
2.38	4.98	4.81
63.64	90.46	49.03
4.81	1.41	3.30
95.60	126.85	81.08
104.60%	78.83%	123.33%
$77.39	$76.14	$76.37
4.81	3.47	6.85
10.68	11.74	12.60
92.88	91.35	95.82
7.12	8.65	4.18
7.45%	6.82%	5.16%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING**		
		TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	19	$1,890,000	$3,566,000	$108,000
TOTAL - PROFIT LEADERS*	5	1,018,000	1,641,000	145,000
BY SIZE OF FIRM				
ALL FIRMS				
$0-$500,000	2	273,000	393,000	35,000
$500,000-$1,500,000	4	612,000	859,000	50,000
$1,500,000-$3,000,000	2	1,523,000	2,948,000	103,000
Over $3,000,000	11	2,716,000	5,240,000	144,000
PROFIT LEADERS				
$500,000-$1,500,000	2	332,000	577,000	60,000
BY PRODUCT SPECIALTY				
ALL FIRMS				
Pamphlet	7	1,856,000	3,131,000	(6,000)
Edition Books	4	2,537,000	5,368,000	322,000
Looseleaf	3	1,846,000	3,608,000	95,000
No Predominant Specialty	2	273,000	393,000	35,000
Other	3	2,231,000	4,254,000	152,000
PROFIT LEADERS				
Pamphlet	2	974,000	1,758,000	154,000
Edition Books	2	1,448,000	2,187,000	187,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of its size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

			% of Sales	
Firm	Sales	Factory Payroll	Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

---

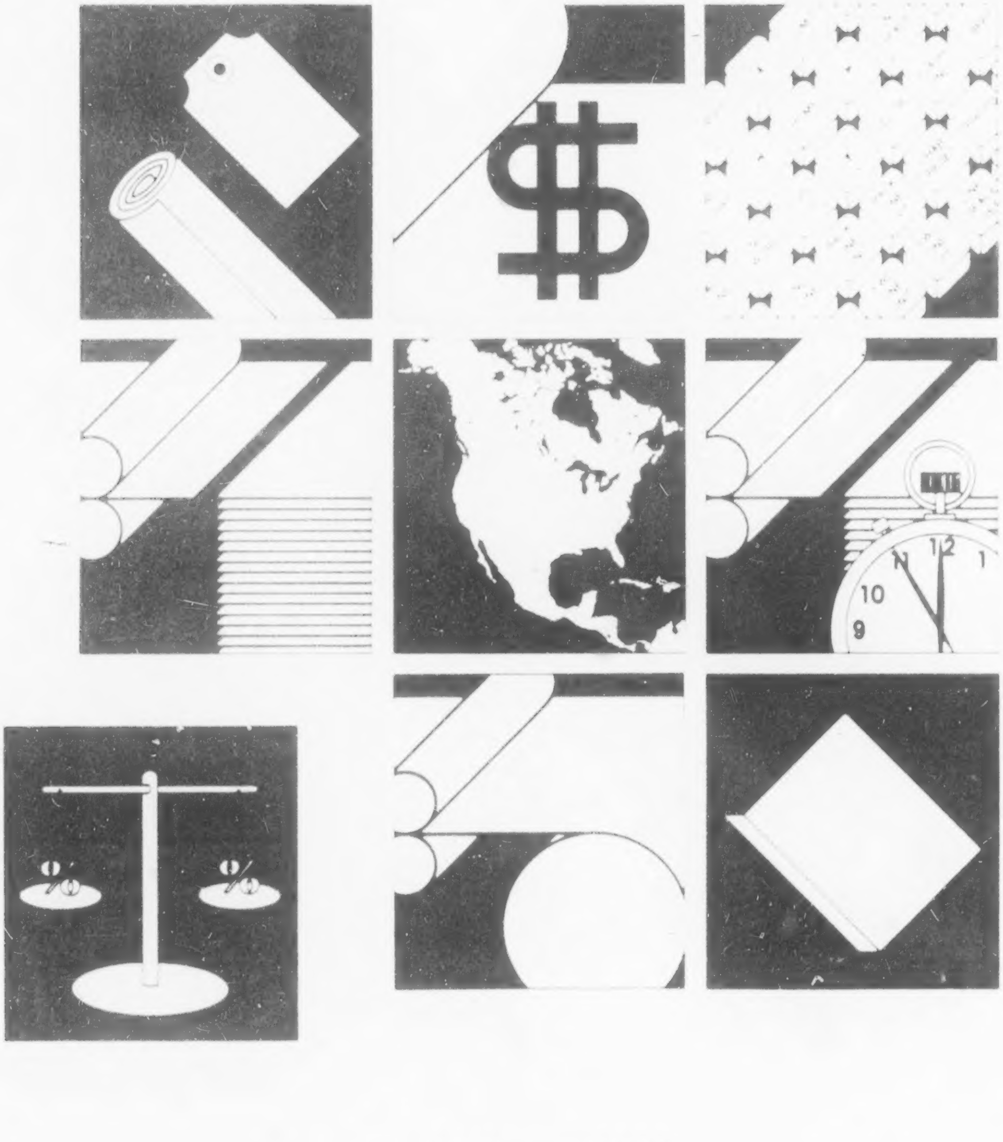
* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.

** Unlike the ratios shown in this book, these figures are arithmetic averages.

A8740-1,144
10/87

PIA
1887–1987

1987 Financial Ratio Study



Volume XIV

Quick Printers' Ratios

1987
FINANCIAL
RATIO STUDY

Volume XIV: Quick Printers' Ratios

An Annual Financial Survey Conducted By:
Printing Industries of America, Inc.
PIA Member Programs Services
1730 North Lynn Street
Arlington, VA 22209

Edited and Prepared by:

H. R. Margolis
Certified Public Accountants
New York and Philadelphia (Bala Cynwyd)

Computed by:

RGS Enterprises, Inc.
1 Carlisle Drive
Arnold, MD 21012

This material may not be reproduced in whole or in part in any form without express permission.
©1987 by Printing Industries of America, Inc.

PIA **PRINTING INDUSTRIES OF AMERICA, INC.**
1730 North Lynn Street, Arlington, VA 22209 (703) 841-4805

1987 is the 64th year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addreses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

H. R. MARGOLIS COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

OFFICES
PHILADELPHIA
NEW YORK

Dear Quick Printers:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community in compiling these financial ratios. In all, 933 graphic arts firms of various types took part in the 1987 study. This particular volume is the result of financial information contributed by 23 Quick Printers across the United States and Canada.

To help readers compare their own financial statements to those of other quick printing firms, the data is presented here by sales volume - for example, sales to $250,000, sales from $250,000 to $500,000, etc. Readers can compare their firm's operations with other firms having the same sales volume in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts, and Return on Investment.

The importance of sharing this type of information among members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. Margolis Company

H. R. MARGOLIS COMPANY

TABLE OF CONTENTS

Page Number

FOREWORD.. 2

ALL QUICK PRINTERS BY SALES VOLUME.. 4-13
All Firms Reporting
0 to $250,000
$250,000 to $500,000
$500,000 to $1,500,000
$5,000,000 to $10,000,000

Report on Operations - Sales = 100%.. 4- 5
Supporting Schedules - Sales = 100%.. 4- 7
Balance Sheet.. 8- 9
Significant Facts.. 10-11
Return on Investment Chart - Per $100 of Sales - All Firms Reporting......... 12
Return on Investment - Per $100 of Sales - By Size of Firm.................. 13

ABSOLUTE DATA.. 14

BASIC GUIDE TO USING YOUR QUICK PRINTERS' RATIO STUDY........................ 15-16

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000**
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT			
MATERIALS			
Paper	13.91	10.83	14.46
Other chargeable materials	4.17	2.18	4.04
Outside services	9.06	11.97	9.55
TOTAL MATERIALS	27.14	24.98	28.05
FACTORY PAYROLL	27.10	22.39	29.98
FACTORY EXPENSES	20.78	18.01	22.91
TOTAL FACTORY COST OF PRODUCT	75.02	65.38	80.94
GROSS PROFIT	24.98	34.62	19.06
ADMINISTRATIVE AND SELLING EXPENSES			
Administrative expenses	14.87	12.44	15.99
Selling expenses	8.64	10.76	10.72
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	23.51	23.20	26.71
INCOME (LOSS) BEFORE INTEREST EXPENSE	1.47	11.42	(7.65)
Interest expense	1.81	0.23	3.52
OPERATING INCOME (LOSS)	(0.34)	11.19	(11.17)
Other income (expense)	(0.22)	0.51	0.80
INCOME (LOSS) BEFORE INCOME TAXES	(0.56)	11.70	(10.37)

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS			
Ink	0.70%	0.22%	0.74%
Film	0.72	0.49	1.02
Plates	0.88	0.84	1.18
Other chargeable materials	1.87	0.63	1.10
TOTAL OTHER CHARGEABLE MATERIALS	4.17	2.18	4.04
OUTSIDE SERVICES			
Composition	1.27	0.12	1.81
Offset preparation	0.33	0.07	0.04
Printing	5.73	11.18	4.81
Binding	0.71	0.45	0.93
Other outside services	1.02	0.15	1.96
TOTAL OUTSIDE SERVICES	9.06	11.97	9.55

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Sample insufficient for Profit Leaders.

SALES FROM $250,000-$500,000**	SALES FROM $500,000-$1,500,000		SALES FROM $5,000,000-$10,000,000**
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
100.00%	100.00%	100.00%	100.00%
15.77	12.80	12.37	7.96
4.22	3.71	1.68	3.87
9.08	10.89	17.28	5.44
29.07	27.40	31.33	17.27
28.54	21.74	19.75	27.69
21.78	16.45	15.66	22.62
79.39	65.59	66.74	67.58
20.61	34.41	33.26	32.42
13.77	16.51	11.67	13.20
5.31	11.82	11.26	9.77
19.08	28.33	22.93	22.97
1.53	6.08	10.33	9.45
1.53	1.48	0.46	0.66
0.00	4.60	9.87	8.79
(1.90)	1.80	0.88	0.16
(1.90)	6.40	10.75	8.95

0.60%	0.49%	0.33%	1.26%
0.62	0.52	0.24	0.69
0.75	1.09	1.11	0.19
2.25	1.61	0.00	1.73
4.22	3.71	1.68	3.87
1.72	0.13	0.23	0.10
0.50	0.16	0.00	0.68
5.18	9.68	16.85	3.90
0.65	0.78	0.20	0.38
1.03	0.14	0.00	0.38
9.08	10.89	17.28	5.44

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $250,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
FACTORY PAYROLL			
Salaries - executive	4.33%	4.16%	5.66%
Direct wages	17.54	12.96	20.84
General factory salaries and wages	1.30	0.76	0.00
Packing, shipping and delivery wages	0.47	0.52	0.00
Payroll taxes	2.06	1.57	2.27
Employee benefits	1.40	2.42	1.21
TOTAL FACTORY PAYROLL	27.10	22.39	29.98
FACTORY EXPENSES			
Fixed Expenses			
Depreciation - real estate	0.00	0.00	0.00
Depreciation - other	5.29	2.44	4.62
Taxes - real estate	0.06	0.00	0.00
Taxes - other	0.16	0.03	0.07
Insurance	0.98	0.84	1.53
Building rent	4.70	4.07	6.96
Utilities - heat, light, etc.	1.11	0.84	1.18
Equipment rental	3.88	4.97	3.89
Total Fixed Expenses	16.18	13.19	18.25
Other Expenses			
Factory supplies and expense	1.13	1.76	1.15
Packing, shipping and delivery expense	0.85	1.52	0.56
Repairs and maintenance	1.97	1.13	2.56
Other factory expenses	0.65	0.41	0.39
Total Other Expenses	4.60	4.82	4.66
TOTAL FACTORY EXPENSES	20.78	18.01	22.91
ADMINISTRATIVE EXPENSES			
Salaries - executive	6.15	4.65	7.14
Salaries - office	2.18	1.37	3.06
Payroll taxes	0.49	0.25	0.39
Employee benefits	0.77	0.95	0.31
Bad debts	0.75	2.01	1.16
Office supplies and expenses	0.80	0.88	0.85
Professional fees	0.92	0.68	0.79
Taxes - business	0.10	0.10	0.09
Telephone	0.74	0.77	1.06
Other administrative expenses	1.97	0.78	1.14
TOTAL ADMINISTRATIVE EXPENSES	14.87	12.44	15.99
SELLING EXPENSES			
Salaries - executive	1.95	3.90	4.64
Salaries and commissions - salesmen	1.43	1.41	1.51
Salaries - sales office clerical	1.12	1.63	0.00
Payroll taxes	0.29	0.35	0.25
Employee benefits	0.25	0.58	0.16
Advertising	1.88	0.94	2.08
Travel and entertainment	0.76	0.56	1.08
Other selling expenses	0.96	1.39	1.00
TOTAL SELLING EXPENSES	8.64	10.76	10.72

** Sample insufficient for Profit Leaders.

SALES FROM $250,000-$500,000**	SALES FROM $500,000-$1,500,000		SALES FROM $5,000,000-$10,000,000**
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
3.74%	4.20%	5.17%	6.30%
18.70	13.25	10.40	14.94
2.38	0.00	0.00	1.52
0.38	0.82	0.39	0.91
2.13	1.80	1.09	2.02
1.21	1.67	2.70	2.00
28.54	21.74	19.75	27.69
0.00	0.00	0.00	0.00
7.16	3.56	3.78	3.40
0.15	0.00	0.00	0.00
0.17	0.18	0.01	0.30
1.23	0.32	0.30	0.35
4.80	2.94	2.79	4.10
1.30	0.95	0.81	0.66
2.91	4.38	3.64	5.65
17.72	12.33	11.33	14.46
1.11	1.13	1.36	1.22
0.49	1.00	2.10	2.54
1.60	1.25	0.70	4.00
0.86	0.74	0.17	0.40
4.06	4.12	4.33	8.16
21.78	16.45	15.66	22.62
6.38	5.04	3.43	4.92
1.35	2.42	1.43	2.89
0.51	0.63	0.34	0.35
0.94	0.81	1.38	0.74
0.40	1.25	2.35	0.40
0.95	0.58	0.73	0.58
0.83	1.32	0.34	0.87
0.13	0.09	0.19	0.04
0.72	0.52	0.43	0.47
1.56	3.85	1.05	1.94
13.77	16.51	11.67	13.20
0.79	1.38	3.44	1.86
0.47	1.49	0.00	3.64
0.58	3.71	3.08	0.37
0.13	0.57	0.44	0.36
0.12	0.42	0.80	0.44
1.58	2.38	0.99	2.01
0.64	0.71	0.06	0.59
1.00	1.16	2.45	0.50
5.31	11.82	11.26	9.77

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $250,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
ASSETS			
CURRENT ASSETS			
Cash	14.19%	19.96%	12.20%
Receivables	25.49	32.11	26.36
Inventories	7.75	6.57	9.40
Other current assets	1.53	0.94	0.26
TOTAL CURRENT ASSETS	48.96	59.58	48.22
FIXED ASSETS			
Real estate	0.72	0.00	0.00
Less: Accumulated depreciation	0.47	0.00	0.00
	0.25	0.00	0.00
Machinery and equipment	86.89	63.62	94.99
Less: Accumulated depreciation	50.83	35.05	52.59
	36.06	28.57	42.40
Other fixed assets	11.27	13.61	7.76
Less: Accumulated depreciation	4.94	10.16	5.46
	6.33	3.45	2.30
NET FIXED ASSETS	42.64	32.02	44.70
OTHER ASSETS	8.40	8.40	7.08
TOTAL ASSETS	100.00	100.00	100.00
LIABILITIES AND EQUITY			
CURRENT LIABILITIES			
Notes payable	5.82	1.26	8.56
Accounts payable	10.94	10.06	19.40
Other current liabilities	14.22	5.97	15.20
TOTAL CURRENT LIABILITIES	30.98	17.29	43.16
LONG-TERM LIABILITIES	34.98	11.01	48.81
TOTAL LIABILITIES	65.96	28.30	91.97
SHAREHOLDERS' AND PROPRIETORS' EQUITY	34.04	71.70	8.03
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.58	3.45	1.12
QUICK RATIO	1.33	3.07	0.90
TOTAL LIABILITIES TO EQUITY	1.94	0.39	11.45
LONG-TERM LIABILITIES TO EQUITY	1.03	0.15	6.08
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.58	0.55	0.55

** Sample insufficient for Profit Leaders.

SALES FROM $250,000-$500,000**	SALES FROM $500,000-$1,500,000		SALES FROM $5,000,000-$10,000,000**
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
16.31%	9.62%	10.99%	23.49%
18.26	29.29	26.86	32.59
8.26	7.10	9.14	3.60
0.65	2.45	0.87	4.97
43.48	48.46	47.86	64.65
1.65	0.00	0.00	0.00
1.07	0.00	0.00	0.00
0.58	0.00	0.00	0.00
100.80	72.21	78.13	62.46
61.06	43.53	47.76	30.98
39.74	28.68	30.37	31.48
12.25	14.92	20.12	5.74
2.50	9.80	14.68	2.99
9.75	5.12	5.44	2.75
50.07	33.80	35.81	34.23
6.45	17.74	16.33	1.12
100.00	100.00	100.00	100.00
4.06	8.45	2.45	4.07
6.74	12.86	12.79	6.13
16.32	8.35	5.47	14.14
27.12	29.66	20.71	24.34
37.67	25.02	21.94	18.02
64.79	54.68	42.65	42.36
35.21	45.32	57.35	57.64
100.00	100.00	100.00	100.00
1.60	1.63	2.31	2.66
1.30	1.39	1.87	2.51
1.84	1.21	0.74	0.73
1.07	0.55	0.38	0.31
0.61	0.60	0.61	0.50

SIGNIFICANT FACTS

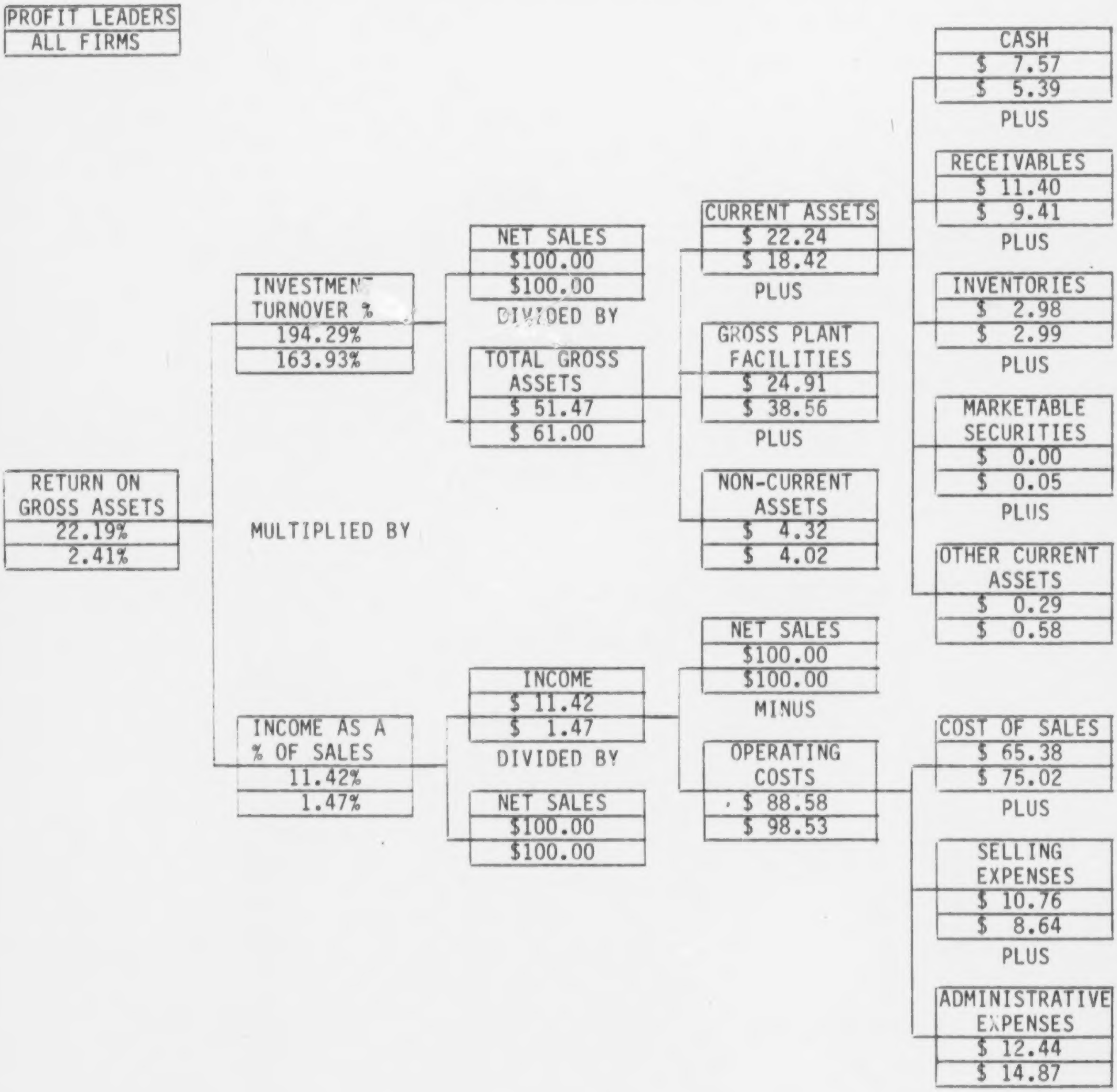
	ALL FIRMS REPORTING		SALES TO $250,000**
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT			
Average assets per employee - All employees	$ 20,450	$ 25,481	$ 14,807
Average assets per factory employee (Excluding Executives)	33,180	41,612	29,345
Average net worth per employee - All employees	7,517	19,214	795
Average gross plant investment per factory employee (Excluding Executives)	29,700	27,694	29,255
Net worth percentage of fixed assets	138.78%	330.25%	34.55%
EMPLOYEES			
Percent factory - All employees	72.62%	71.31%	67.89%
Percent administrative - All employees	17.08	11.79	19.52
Percent sales - All employees	10.30	16.90	12.59
SALES - VALUE OF PRODUCT PRODUCED			
INCLUDING EXECUTIVES			
Sales per employee - All employees	$ 50,816	$ 66,428	$ 37,047
Sales per factory employee	73,071	95,610	57,973
Sales less material per factory employee	52,809	69,783	40,765
Sales per administrative employee	331,042	572,013	235,377
EXCLUDING EXECUTIVES			
Sales per employee - All employees	65,221	80,623	54,199
Sales per factory employee	82,899	107,897	69,845
Sales less material per factory employee	59,811	78,809	48,715
SALES PER SALESMAN	300,207	630,634	0
SALES TO CURRENT ASSETS	669%	569%	581%
PAYROLL - INCLUDING TAXES AND BENEFITS			
INCLUDING EXECUTIVES			
Total payroll percentage of sales	41.74%	37.48%	47.44%
Factory payroll percentage of gross plant investment	96.06	109.68	75.69
Payroll per employee - All employees	$ 20,484	$ 24,390	$ 16,795
Payroll per factory employee	18,230	20,452	15,458
Payroll per administrative employee	28,225	42,479	22,416
Payroll per sales employee	22,350	32,378	26,700
PAYROLL - EXCLUDING TAXES AND BENEFITS			
EXCLUDING EXECUTIVES			
Payroll per employee - All employees	$ 14,690	$ 14,721	$ 12,389
Payroll per factory employee	14,605	14,037	12,755
Payroll per administrative employee	9,808	13,070	9,410
Payroll per sales employee	12,491	15,989	4,885
EXECUTIVE PAYROLL			
Payroll per executive - All executives	33,669	45,854	23,648
Payroll per factory executive	18,407	32,864	17,989
Payroll per administrative executive	38,440	65,400	22,751
Payroll per sales executive	21,783	62,864	22,920
RECEIVABLES			
Collection period	35.2	42.8	39.8
PROFIT			
Gross profit percentage of sales	24.98%	34.62%	19.06%
Average gross profit per factory employee	$ 22,644	$ 37,338	$ 15,445
Income (loss) before taxes percentage of sales	(0.56)%	11.70%	(10.37)%
Average income (loss) before taxes per employee	$ 811	$ 7,843	$ (2,871)

** Sample insufficient for Profit Leaders.

SALES FROM $250,000-$500,000**	SALES FROM $500,000-$1,500,000		SALES FROM $5,000,000-$10,000,000**
ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
$ 20,879	$ 24,610	$ 30,163	$ 22,267
30,307	43,292	53,002	33,766
6,452	13,358	20,988	13,937
31,241	34,560	41,488	19,746
121.98%	193.76%	293.52%	287.40%
78.31%	64.27%	64.29%	78.83%
17.65	15.95	13.16	12.42
4.04	19.78	22.55	8.75
$ 48,932	$ 61,664	$ 76,181	$ 60,027
64,545	99,330	118,504	76,512
45,653	70,507	80,068	63,365
286,894	420,370	603,782	500,717
64,756	72,749	91,707	72,573
72,412	110,993	134,320	90,758
51,132	78,902	90,830	75,166
106,730	175,000	0	440,317
798%	624%	724%	476%
39.82%	38.21%	34.09%	43.25%
77.56	112.66	65.66	149.76
$ 18,994	$ 22,668	$ 24,690	$ 26,422
17,495	20,339	22,271	21,164
21,603	34,368	40,222	46,444
6,961	36,438	23,561	43,207
$ 14,424	$ 14,822	$ 13,644	$ 17,746
14,785	14,625	13,864	15,682
4,466	13,500	14,010	20,177
2,541	28,607	12,906	31,908
25,791	45,817	48,381	46,759
10,198	28,478	48,381	30,796
22,696	56,991	53,895	87,644
6,393	17,882	44,705	79,023
25.0	39.4	34.2	45.1
20.61%	34.41%	33.26%	32.42%
$ 15,604	$ 38,239	$ 44,377	$ 30,645
(1.90)%	6.40%	10.75%	8.95%
$ (626)	$ 4,524	$ 8,500	$ 5,713

RETURN ON INVESTMENT (ROI) CHART - ALL FIRMS REPORTING

RETURN ON INVESTMENT CHART - BASE: $100 OF SALES


PROFIT LEADERS
ALL FIRMS
RETURN ON GROSS ASSETS
22.19%
2.41%
MULTIPLIED BY
INVESTMENT TURNOVER %
194.29%
163.93%
NET SALES
$100.00
$100.00
DIVIDED BY
TOTAL GROSS ASSETS
$ 51.47
$ 61.00
CURRENT ASSETS
$ 22.24
$ 18.42
PLUS
GROSS PLANT FACILITIES
$ 24.91
$ 38.56
PLUS
NON-CURRENT ASSETS
$ 4.32
$ 4.02
CASH
$ 7.57
$ 5.39
PLUS
RECEIVABLES
$ 11.40
$ 9.41
PLUS
INVENTORIES
$ 2.98
$ 2.99
PLUS
MARKETABLE SECURITIES
$ 0.00
$ 0.05
PLUS
OTHER CURRENT ASSETS
$ 0.29
$ 0.58
INCOME AS A % OF SALES
11.42%
1.47%
INCOME
$ 11.42
$ 1.47
DIVIDED BY
NET SALES
$100.00
$100.00
NET SALES
$100.00
$100.00
MINUS
OPERATING COSTS
$ 88.58
$ 98.53
COST OF SALES
$ 65.38
$ 75.02
PLUS
SELLING EXPENSES
$ 10.76
$ 8.64
PLUS
ADMINISTRATIVE EXPENSES
$ 12.44
$ 14.87

RETURN ON INVESTMENT - PER $100 OF SALES

	SALES TO $250,000**	SALES FROM $250,000-$500,000**	SALES FROM $500,000-$1,500,000		SALES FROM $5,000,000-$10,000,000**
	ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS	ALL FIRMS
INVESTMENT					
Current Assets:					
Cash	$ 3.42	$ 6.99	$ 3.31	$ 4.31	$ 9.15
Receivables	10.59	6.75	10.70	9.36	12.11
Inventories	3.59	3.06	3.18	4.59	1.28
Marketable securities	0.00	0.11	0.00	0.00	0.00
Other current assets	0.10	0.24	1.08	0.19	1.73
	17.70	17.15	18.27	18.45	24.27
Plant Investment:					
Land and building	0.00	0.53	0.00	0.00	0.00
Machinery and equipment	37.91	40.92	29.81	26.30	21.66
Other fixed assets	2.99	3.23	5.23	4.32	2.17
	40.90	44.68	35.04	30.62	23.83
Non-Current Assets	3.84	3.17	8.03	8.45	0.41
TOTAL INVESTMENT	62.44	65.00	61.34	57.52	48.51
INVESTMENT TURNOVER PER $100 OF SALES	160.15%	153.85%	163.03%	173.85%	206.14%
EARNINGS					
Cost of Product	$ 80.94	$79.39	$65.59	$66.74	$67.58
Selling Expenses	10.72	5.31	11.82	11.26	9.77
Administrative Expenses	15.99	13.77	16.51	11.67	13.20
	107.65	98.47	93.92	89.67	90.55
Income (Loss) Before Interest, Other Income (Expense), and Taxes	(7.65)	1.53	6.08	10.33	9.45
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME (LOSS)	(12.25)%	2.35%	9.91%	17.96%	19.48%

** Sample insufficient for Profit Leaders.

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING** TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	23	$422,000	$1,095,000	$ 69,000
TOTAL - PROFIT LEADERS*	4	955,000	2,434,000	305,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$250,000	5	85,000	205,000	(19,000)
$250,000-$500,000	10	167,000	363,000	(7,000)
$500,000-$1,500,000	5	382,000	964,000	49,000
$5,000,000-$10,000,000	2	2,501,000	6,692,000	659,000
PROFIT LEADERS				
$500,000-$1,500,000	2	230,000	622,000	67,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of its size.

The following example illustrates how this calculation process eliminates the problem of the ratios giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales Firm's Ratio Factory Payroll	PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

---

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Unlike the ratios shown in this book, these figures are arithmetic averages.

BASIC GUIDE TO USING YOUR QUICK PRINTERS' RATIO STUDY

You have to know where you stand to make accurate decisions concerning your future. This guide to the ratio study, provided by the American Quick Printing Association, will give you a brief explanation of the purpose of the ratio study and a basic procedure to use to assess information about your shop.

The PURPOSE of the Quick Printers' Ratio Study is to serve as a guide to problem areas in your shop which can inhibit your growth and profitability. The study pinpoints:

- Where other quick printers of your sales volume are financially.
- Profit leaders in your sales volume.
- Problem areas, specifically from paper costs to getting a return on your investment.
- Significant facts expressed both in dollar amounts and percentages that pinpoint areas that need your attention.

WHY RATIOS? The Report on Operations and the Supporting Schedules are presented in percentage form based on sales while the Balance Sheet is presented in percentage form based on total assets as a base of 100%. Therefore, convert your statements to percentages of your sales volume or total assets to make specific comparisons. The PIA Ratio Study Program utilizes percentages because dollar amounts can vary for each quick printing shop, but percentages using sales volume or total assets as a base of 100% provide a common denominator for more accurate comparison.

THE BASIC PROCEDURE to use the Quick Printers' Ratio Study is to prepare your Statement of Operations and Balance Sheet, based on percentages. You can do this, one item at a time comparing each item as you progress...or convert your information at one time, then compare taking special note of problem areas. If you participated in the study, it is a good idea to get your copy of your input and the Chart of Accounts provided by PIA to refresh your understanding of the data.

Compare your percentages to the profit leaders in your sales volume category. If you see a large discrepancey in a particular area, multiply and convert the figures back to dollars, using your sales volume as a base, to get the actual cost of this problem area to your shop. By using this comparison, the study can give you specific direction as to where you can increase your current profits by focusing more effective management controls on areas that are not pulling their weight in your operation.

You now have a standard to investigate and improve your operation. Now that you are familiar with the use of this study, as you participate each year, make it a habit to thoroughly check your shop at least yearly to see how you measure with your peers in each of the categories.

KEEP IN MIND in working with this data, that when you participate, your firm's individual ratios are computed, then combined with individual ratios of other similar firms, rather than being based on a total dollar sum percentage for a group of companies. The result is a more representative ratio of the quick printing industry on a "common size basis"...where your shop is directly reflected and also used to evaluate other operations. A more specific guide, going step-by-step through a sample firm evaluation, is available in the first volume of the PIA Ratio Studies.